

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.







UNITED STATES  
DEPARTMENT OF AGRICULTURE  
LIBRARY



Reserve

BOOK NUMBER      A395  
933270                  R312



3

A SUMMARY OF CERTAIN PESTICIDE CHEMICAL USES,

3a

Published as an Aid to Registrants  
in Preparing Acceptable Labeling

Pesticide Regulation Section  
2a Plant Pest Control Division, Sub ° x-ref  
2 U.S. Agricultural Research Service. (see 2a)  
United States Department of Agriculture

April 1957



## Introduction

This publication has been prepared to aid registrants under the Federal Insecticide, Fungicide, and Rodenticide Act in preparing legal labeling. It is not intended to modify or supplant any recommendation which is made by this Department or by the various States. In developing the accompanying charts, consideration was given only to those applications of pesticide chemicals which have been registered under the Federal Insecticide, Fungicide, and Rodenticide Act for use on raw agricultural commodities as defined in the Miller Pesticide Chemicals Amendment (Public Law 518). However, some of the limitations which are shown have not previously been registered. The charts take into consideration all of the tolerances and exemptions which have been established under the provisions of the Federal Food, Drug, and Cosmetic Act, including those established under Public Law 518 prior to February 15, 1957. They also take into consideration those pesticide chemicals which have been declared "safe" under that Act when they are used in accordance with good agricultural practice. The charts include only those applications to the raw agricultural commodities listed which information available to the Pesticide Regulation Section indicates will be in compliance with the provisions of Public Law 518 under varying conditions in all parts of the country when the directions, time limits and restrictive labeling shown in the tabulations are followed.\* A pesticides-on-food use not shown in the charts may be cleared for inclusion in one of the following ways:

1. Through the establishment of a tolerance under the Federal Food, Drug, and Cosmetic Act for residues from such use.
2. Through the establishment of an exemption from the requirement of a tolerance under the Federal Food, Drug, and Cosmetic Act for residues from such use.
3. Through the submission of a statement from the Food and Drug Administration that the pesticide chemical is not a poisonous or deleterious substance but is safe for use.
4. Through the submission of adequate information to show that there will be no residue when the product is used as directed.

---

\*It will be noted that certain of the time limits and restrictions vary from those appearing on currently registered labeling.

933270

Explanation of Charts

Charts are set up for individual pesticide chemicals, which are identified by the well-known common names as well as by the chemical designations.

The heading of each chart includes the Principal Formulations which have been registered for the chemical involved. These will cover emulsifiable concentrates (EC), wettable powders (WP), solutions and dusts, where appropriate.

The tabulations on the charts are divided into four columns under the following headings:

1. "Use" - In this column are listed the names of the crops or animals on which the product is applied. Uses which might cause incidental contamination, such as through treatment of premises, are not considered in this survey.

2. "Tolerances or Basis of Acceptance" - In this column are listed the numerical tolerance, a statement that the product has been exempted from the need of a tolerance, a statement that the product is safe, a designation that there will be no residues (N.R.) when the product is used precisely as directed, or the term "restrictive labeling." This latter term applies to those uses which may leave residues on the crop treated, but because of the restrictions stated in the fourth column, will not result in contamination of milk or meat.

3. "Dosage" - In this column a single pattern dosage is given in the weight of the active chemical per acre of treated crop, unless otherwise designated. Usually, the dosage shown is the largest of the normally accepted dosages, although that is not necessarily true.

4. "Limitations" - In this column are listed any specific directions for use which must be applied to insure that the dosage given will not exceed the tolerance, or will leave no residue on the crop involved.

It was not possible to include all acceptable doses and related limitations in the charts. As a consequence, the single dosage and its specific limitation given is to be considered as a pattern of a usage which will be free from the danger of causing illegal residues. In using the charts, therefore, it is logical to assume that any uses involving the dosage given with longer time limits, or lower dosages with the same time limits, would be equally free from danger. In addition, it is possible that higher dosages with longer time limits or lower dosages with shorter time limits also may be free from danger, but to be acceptable for registration such deviations from the pattern would need to be supported by adequate residue data.



✓ It is contemplated that revisions of the charts will be issued periodically and as promptly as possible after the basis for the changes required and the evidence supporting them have been submitted. All proposals for additions to or corrections in the charts should be prepared in duplicate and forwarded, together with data to justify the changes, to the Pesticide Regulation Section, Plant Pest Control Division, Agricultural Research Service, U. S. Department of Agriculture, Washington, D. C.

ACTI-DIONE  
(Cycloheximide)

PRINCIPAL FORMULATIONS: 7.7% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Cherries	N.R.	2 ppm spray solution	4 days





## ALDRIN

1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon;  
 50% wettable powder; 75% wettable powder for seed treatment; 2.5% dusts and  
 granular mixtures; 0.1% to 1.0% fertilizer mixtures

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		S=Soil F=Foliage lbs./A.	
Apples	p.p.m. 0.25	0.25 F	30 days
Apricots	0.25	0.25 F	21 days
Asparagus	0.1	3.0 S	Apply only before shoots appear.
Barley	0.1	0.5 F 3.0 S 1.5 oz./100 lbs.	21 days Preplanting treatment only Seed treatment
Barley straw	0.75	0.5 F 3.0 S 1.5 oz./100 lbs.	5 days Preplanting treatment only Seed treatment
Beans	0	3.0 S 0.5 oz./100 lbs.	Do not apply after the edible parts start to form. Seed treatment
Beets	0.25	0.5 F 3.0 S	14 days Do not apply after the edible parts start to form.
Blackeyed peas	0	3.0 S 0.5 oz./100 lbs.	Do not apply after the edible parts start to form. Seed treatment
Blueberries	N.R.	5.0 S	Application only in early spring when no fruit is present.



ALDRIN

1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon;  
50% wettable powder; 75% wettable powder for seed treatment; 2.5% dusts and  
granular mixtures; 0.1% to 1.0% fertilizer mixtures

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		S=Soil F=Foliage lbs./A.	
Broccoli	0.25	0.5 F 3.0 S	14 days Do not apply after the edible parts start to form.
Brussels sprouts	0.25	0.5 F 3.0 S	14 days Do not apply after the edible parts start to form.
Cabbage	0.25	0.5 F 3.0 S	21 days Do not apply after the edible parts start to form.
Cantaloupes	0.1	0.5 F	7 days
Carrots	0.1	0.5 F	14 days
Cauliflower	0.25	0.5 F 3.0 S	21 days Do not apply after the edible parts start to form.
Celery	0.1	3.0 S	Preplanting treatment only
Cherries	0.1	0.25 F	21 days
Collards	0.25	0.5 F	14 days
Corn - field, pop, and sweet	0	3.0 S 1.5 oz./bu.	Preplanting treatment only Seed treatment
Cotton	N.R. (on cottonseed)	0.5 F	DO NOT FEED COTTON TRASH TO DAIRY ANIMALS OR ANIMALS BEING FINISHED FOR SLAUGHTER.
	N.R.	0.75 oz./100 bu.	Seed treatment





ALDRIN

1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon;  
50% wettable powder; 75% wettable powder for seed treatment; 2.5% dusts and  
granular mixtures; 0.1% to 1.0% fertilizer mixtures

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		S=Soil F=Foliage lbs./A.	
Cranberries	0.1	0.25 F 5.0 S	21 days Do not apply after the edible parts start to form.
Cucumbers	0.25	0.5 F 3.0 S 1 oz./bu.	14 days Do not apply after the edible parts start to form. Seed treatment
Eggplant	0.1	0.5 F 3.0 S	7 days Do not apply after the edible parts start to form.
Endive	0.25	0.5 F 3.0 S	30 days Preplanting treatment only
Garlic	0.25	3.0 S 1 lb./100 lbs.	Preplanting treatment only Seed treatment
Grapes	0.1	0.25 F	7 days
Grapefruit	0.25	0.25 F	30 days
Horse-radishes	0.1	0.5 F	14 days
Kale	0.25	0.5 F	14 days
Kohlrabi	0.25	0.5 F 3.0 S	14 days Do not apply after the edible parts start to form.
Leeks	0.25	3.0 S 1 lb./100 lbs.	Preplanting treatment only Seed treatment
Lemons	0.25	0.25 F	30 days





ALDRIN

1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon;  
50% wettable powder; 75% wettable powder for seed treatment; 2.5% dusts and  
granular mixtures; 0.1% to 1.0% fertilizer mixtures

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		S=Soil F=Foliage <u>lbs./A.</u>	
Lettuce	p.p.m. 0.25	0.5 F 3.0 S	30 days Preplanting treatment only
Limes	0.25	0.25 F	30 days
Mangoes	0.1	0.25 F 3.0 S	21 days Do not apply after the edible parts start to form.
Melons	0.1	0.5 F	7 days
Muskmelons	0.1	0.5 F	7 days
Mustard greens	0.25	0.5 F	14 days
Nectarines	0.1	0.25 F 3.0 S	21 days Do not apply when fruit is present.
Oats	0.1	0.5 F 3.0 S 1.5 oz./100 lbs.	21 days Preplanting treatment only Seed treatment
Oats straw	0.75	0.5 F 3.0 S 1.5 oz./100 lbs.	5 days Preplanting treatment only Seed treatment
Onions	0.25	3.0 S 1 lb./100 lbs.	Preplanting treatment only Seed treatment
Oranges	0.25	0.25 F	30 days
Parsnips	0.1	0.5 F	14 days



ALDRIN

1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon;  
50% wettable powder; 75% wettable powder for seed treatment; 2.5% dusts and  
granular mixtures; 0.1% to 1.0% fertilizer mixtures

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		S=Soil F=Foliage lbs./A.	
Peaches	0.1	0.25 F 3.0 S	21 days Do not apply when fruit is present.
Peanuts	0.25	5.0 S	Preplanting or soon after
Pears	0.25	0.25 F	30 days
Peppers	0.1	0.5 F 3.0 S	7 days Do not apply after the edible parts start to form.
Pimentos	0.1	0.5 F 3.0 S	7 days Do not apply after the edible parts start to form.
Pineapples	0.1	2.0 F 10.0 S	30 days Preplanting treatment only
Plums	0.1	0.25 F	21 days
Potatoes, Irish	0.1	3.0 S	Preplanting treatment only
Prunes	0.1	0.25 F	21 days
Pumpkins	0.1	0.5 F	7 days
Quinces	0.25	0.25 F	30 days
Radishes	0.1	0.5 F	14 days
Raspberries and other cane berries	N.R.	5.0 S	Application only in early spring when no fruit is present.





ALDRIN

1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon;  
50% wettable powder; 75% wettable powder for seed treatment; 2.5% dusts and  
granular mixtures; 0.1% to 1.0% fertilizer mixtures

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		S=Soil F=Foliage	
	p.p.m.	lbs./A.	
Rice	0.1	0.5 F 3.0 S 1.5 oz./100 lbs.	21 days Preplanting treatment only Seed treatment
Rice straw	0.75	0.5 F 3.0 S 1.5 oz./100 lbs.	5 days Preplanting treatment only Seed treatment
Rutabagas and tops	0.25	0.5 F 3.0 S	14 days Do not apply after the edible parts start to form.
Rye	0.1	0.5 F 3.0 S 1.5 oz./100 lbs.	21 days Preplanting treatment only Seed treatment
Rye straw	0.75	0.5 F 3.0 S 1.5 oz./100 lbs.	5 days Preplanting treatment only Seed treatment
Salsify	0.1	0.5 F	14 days
Shallot	0.25	3.0 S 1 lb./100 lbs.	Preplanting treatment only Seed treatment
Soybeans	0	3.0 S 0.5 oz./100 lbs.	Do not apply after the edible parts start to form Seed treatment



ALDRIN

1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon;  
50% wettable powder; 75% wettable powder for seed treatment; 2.5% dusts and  
granular mixtures; 0.1% to 1.0% fertilizer mixtures

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		S=Soil F=Foliage lbs./A.	
Spinach	p.p.m. 0.25	0.5 F	14 days
Strawberries	0.1	5.0 S	Do not apply after the edible parts start to form.
Sugar beets	0.1	5.0 S	Preplanting treatment only
Sugar cane	N.R.	5.0 S	Soil application to seed pieces.
Summer squash	0.25	0.5 F 3.0 S 1 oz./bu.	14 days Do not apply after the edible parts start to form. Seed treatment
Sweetpotatoes	0.1	3.0 S	Preplanting treatment only
Swiss chard	0.25	0.5 F	14 days
Tangerines	0.25	0.25 F	30 days
Tomatoes	0.1	0.5 F 3.0 S	7 days Preplanting treatment only
Turnips	0.25	0.5 F 3.0 S	14 days Do not apply after the edible parts start to form.
Watermelons	0.1	0.5 F	7 days
Wheat	0.1	0.5 F 3.0 S 1.5 oz./100 lbs.	21 days Preplanting treatment only Seed treatment





ALDRIN

1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon;  
50% wettable powder; 75% wettable powder for seed treatment; 2.5% dusts and  
granular mixtures; 0.1% to 1.0% fertilizer mixtures

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		$\frac{S=\text{Soil}}{F=\text{Foliage}}$ $\frac{\text{lbs.}}{\text{A.}}$	
Wheat straw	p.p.m. 0.75	0.5 F 3.0 S 1.5 oz./100 lbs.	5 days Preplanting treatment only Seed treatment
Winter squash	0.1	0.5	7 days
Alfalfa and clover	Restrictive labeling	4 oz./A.	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not use on for- age to be sold commercially or to be shipped interstate.
Grass, pasture and range	Restrictive labeling	4 oz./A.	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Alfalfa Cowpeas Clover Lespedeza Sorghum	N.R.	3	Preplanting soil application only



ALLETHRIN  
Allyl homolog of Cinerin I

PRINCIPAL FORMULATIONS: Technical allethrin (usually 96%), with or without appropriate synergists; 1% dust; 0.1% to 0.6% aerosol formulations and in distillate formulations with or without synergists and other ingredients

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Beans	Exempt*	lbs./A.	No time limitations (Dust applications only)*
Broccoli (sprouting)			
Brussels sprouts			
Cabbage			
Cauliflower			
Collards		0.5*	
Horse-radishes			
Kale			
Kohlrabi			
Lettuce			
Mustard greens			
Radishes			
Rutabagas			
Turnips			

\* Applies to all uses.





ALLETHRIN  
Allyl homolog of Cinerin I

PRINCIPAL FORMULATIONS: Technical allethrin (usually 96%), with or without appropriate synergists; 1% dust; 0.1% to 0.6% aerosol formulations and in distillate formulations with or without synergists and other ingredients

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Apples		lbs./A.	
Blackberries			
Blueberries			
Crab apples			
Currants			
Figs			
Gooseberries			
Grapes	4 p.p.m. of allethrin*	0.3 to 0.6 grams per 1000 cu. ft. of space.	Covers uses of sprays and dusts in and about canneries and in the field at the time of harvest, also dips of injured fruits when har- vested for control of Drosophila and other flies. Piperonyl butoxide also present in most cases.*
Guavas		Also as 0.1% to 0.2% emul- sion dips.*	
Huckleberries	8 p.p.m. of piperonyl butoxide*		
Loganberries			
Mangoes			
Muskmelons			
Oranges			
Peaches			
Pears			
Pineapples			
Plums (fresh prunes)			
Raspberries			
Tomatoes			

\* Applies to all uses.



ALLETHRIN  
(Allyl homolog of Cinerin I)

PRINCIPAL FORMULATIONS: Technical allethrin (usually 96%), with or without appropriate synergists; 1% dust; 0.1% to 0.6% aerosol formulations and in distillate formulations with or without synergists and other ingredients

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Cattle, including dairy cattle, beef animals, goats, hogs, sheep	N.R.	Sprays containing 0.1% to 3% with piperonyl butoxide or N-(2-ethylhexyl)bicyclo[2.2.1]hept-5-ene-2,3-dicarboximide	Water base, oil base and pressurized sprays, usually synergized, and with other ingredients in order to justify certain insecticidal claims or repellent claims. Oil base sprays may be applied liberally to hogs, but only as mist sprays at the rate of 1-2 oz. once or twice daily to dairy animals the size of a mature cow. Proportionally less should be applied to younger or smaller animals.
Mushroom houses (including mushrooms)	Exempt	0.3 to 0.5 grams per 1000 cu. ft. of space	No time limitations (Dust applications only)



# ALLYL ALCOHOL

PRINCIPAL FORMULATIONS: Technical material

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Vegetable seed beds	N.R.	lbs./A.  156	Apply 10-12 days before seeding. Seed may be sown 5-7 days after treatment if soil temperature is 80° F. or over.





# AMMONIUM SULFAMATE

PRINCIPAL FORMULATIONS: 80% and 95% powders

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Rangelands and pastures	N.R.	75 lbs. to 100 lbs./100 gals. water	For the control of woody plants, wet foliage thoroughly. Apply after brush reaches full leaf stage until leaves change color in fall.



ARAMITE  
2-(p-tert-butyl phenoxy)-1-methylethyl 2-chloroethyl sulfite

PRINCIPAL FORMULATIONS: 3% to 5% dusts; 15% wettable powder, emulsifiable concentrate containing 2 lbs. per gallon, 10% pressurized spray

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE		LIMITATIONS
		S=spray	D=dust	
	p.p.m.	lbs./A.		
Almonds	N.R.	2.7 S 1.2 D		15 days - do not feed treated hulls to livestock.
Apples	1	1.35 S 2.8 D		21 days
Apricots	N.R.	2.0 S 3.0 D		Before fruit begins to form or after harvest.
Beans, green	1	1.2 D 0.33 S		15 days
Blackberries	N.R.	1.35 D 0.45 S		Do not apply after edible parts start to form.
Blueberries	1	0.68 S 2.0 D		21 days
Broccoli	N.R.	0.4 S 1.2 D		Do not apply after edible parts start to form.
Cabbage	N.R.	0.4 S 1.2 D		Do not apply after edible parts start to form.
Cantaloupes	1	1.2 D 0.45 S		15 days
Cauliflower	N.R.	0.4 S 1.2 D		Do not apply after edible parts start to form.
Celery	1	0.4 S 1.0 D		15 days
Cherries	N.R.	2.0 S 3.0 D		Apply only before fruit begins to form or after harvest.



ARAMITE

2-(p-tert-butyl phenoxy)-1-methylethyl 2-chloroethyl sulfite

PRINCIPAL FORMULATIONS: 3% to 5% dusts; 15% wettable powder, emulsifiable concentrate containing 2 lbs. per gallon, 10% pressurized spray

USE	TOLERANCE OR BASIS OF ACCEPTANCE		DOSAGE S=spray D=dust		LIMITATIONS
	p.p.m.	lbs./A.			
Corn, sweet	1	1.2 D 0.45 S			15 days - do not feed treated forage to livestock.
Cotton	N.R. (on cotton seed)	1.0 D 0.3 S			Do not feed treated cotton trash to livestock.
Cucumbers	1	0.45 S 1.2 D			15 days
Currants	N.R.	0.4 S 1.2 D			Apply only before fruit begins to form or after harvest.
Eggplant	N.R.	0.3 S 1.0 D			Do not apply after edible parts start to form.
Grapefruit	1	3.0 D 2.0 S			15 days
Grapes	1	1.35 D 0.45 S			15 days
Lemons	1	2.0 S 3.0 D			21 days 15 days
Lettuce	N.R.	0.4 S 1.2 D			Do not apply after edible parts start to form.
Nectarines	N.R.	2.0 S 3.0 D			Apply only before fruit begins to form or after harvest.
Okra	N.R.	0.3 S 1.0 D			Do not apply after edible parts start to form.
Oranges	1	2.0 S 3.0 D			21 days 15 days





ARAMITE

2-(p-tert-butyl phenoxy)-1-methylethyl 2-chloroethyl sulfite

PRINCIPAL FORMULATIONS: 3% to 5% dusts; 15% wettable powder, emulsifiable concentrate containing 2 lbs. per gallon, 10% pressurized spray

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE		LIMITATIONS
		S=spray	D=dust	
	p.p.m.	lbs./A.		
Peaches	1	2.0	S	21 days
		3.0	D	15 days
Pears	1	1.35	S	15 days
		2.8	D	
Peppers	N.R.	0.3	S	Do not apply after edible parts start to form.
		1.0	D	
Plums	1	1.8	S	15 days
		2.8	D	
Potatoes	N.R.	0.4	S	Foliage treatment only
		1.2	D	
Quinces	N.R.	1.0	S	Apply only before fruit begins to form or after harvest.
		3.0	D	
Raspberries	1	1.35	D	15 days
		0.45	S	
Spinach	N.R.	0.4	S	Seedling stage only
		1.2	D	
Squash	N.R.	0.3	S	Do not apply after edible parts start to form.
		1.0	D	
Strawberries	1	1.2	D	7 days
		0.45	S	
Tomatoes	1	1.35	D	15 days
		0.33	S	
Walnuts	N.R.	2.7	S	15 days - do not feed treated hulls to livestock.
		1.2	D	



ARAMITE

2-(p-tert-butyl phenoxy)-1-methylethyl 2-chloroethyl sulfite

PRINCIPAL FORMULATIONS: 3% to 5% dusts; 15% wettable powder, emulsifiable concentrate containing 2 lbs. per gallon, 10% pressurized spray

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE S=spray D=dust	LIMITATIONS
Watermelons	p.p.m.  1	lbs./A.  1.2 D 0.45 S	15 days



# BARIUM FLUOSILICATE

PRINCIPAL FORMULATIONS: Technical material

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Beans	N.R.	lbs./A.  10	Do not apply after pods start to form.





BENZYL BENZOATE

PRINCIPAL FORMULATIONS: 30% in liquid

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Direct use on animals	N.R.	30% in liquid formulation applied to affected areas	To be used by veterinarians only. No time limitations. Liberal applications are usually needed.



BHC (Technical)  
(1,2,3,4,5,6-hexachlorocyclohexane)

PRINCIPAL FORMULATIONS: Wettable powders containing 12%-36% gamma isomer; dusts containing 1%-3% gamma isomer; emulsifiable concentrates containing 2 lbs. gamma isomer per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A. of gamma isomer	
Alfalfa	N.R.	0.3 as foliage treatment	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not use on forage to be sold commercially or to be shipped interstate.
Apples	5	1.5	60 days, or not after the edible parts start to form.
Apricots	5	1	Paint or spray only the trunk and lower branches.
Apricots	5	3	60 days
Asparagus	5	0.3	Do not apply during the cutting season.
Avocados	5	1.5	Use just before blossoming or just after fruit set.
Beans, including black-eyed peas	5	0.3	Do not apply after the pods start to form.
Blueberries	N.R.	2	Do not apply after the edible parts start to form.
Broccoli	5	0.5	Do not apply after the seedling stage.
Brussels sprouts	5	0.5	Do not apply after the seedling stage.
Cabbage	5	0.5	Do not apply after the seedling stage.



BHC (Technical)  
(1,2,3,4,5,6-hexachlorocyclohexane)

PRINCIPAL FORMULATIONS: Wettable powders containing 12%-36% gamma isomer; dusts containing 1%-3% gamma isomer; emulsifiable concentrates containing 2 lbs. gamma isomer per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A. of gamma isomer	
Cauliflower	5	0.5	Do not apply after the seedling stage.
Celery	5	0.3	Do not apply after the seedling stage.
Cherries	5	1	Paint or spray only the trunk and lower branches.
Citrus fruits	5	7	Do not apply after the edible parts start to form.
Clover	N.R.	0.3 as foliage treatment	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not use on forage to be sold commercially or to be shipped interstate.
Collards	5	0.5	Do not apply after the seedling stage.
Corn and other non-root crops	N.R.	1.5	Soil applications only, at time of planting.
Cotton seed	N.R.	0.5	DO NOT FEED TREATED COTTON TRASH TO DAIRY ANIMALS OR ANIMALS BEING FINISHED FOR SLAUGHTER. Do not apply in rotation with root crops.
Cranberries	N.R.	2	Do not apply after the edible parts start to form.
Currants	N.R.	2	Do not apply after the edible parts start to form.





BHC (Technical)  
(1,2,3,4,5,6-hexachlorocyclohexane)

PRINCIPAL FORMULATIONS: Wettable powders containing 12%-36% gamma isomer; dusts containing 1%-3% gamma isomer; emulsifiable concentrates containing 2 lbs. gamma isomer per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A. of gamma isomer	
Eggplant	5	0.5	Do not apply after the edible parts start to form.
Gooseberries	N.R.	2	Do not apply after the edible parts start to form.
Grapes	5	3	Do not apply after the edible parts start to form.
Kale	5	0.5	Do not apply after the seedling stage.
Kohlrabi	5	0.5	Do not apply after the seedling stage.
Mustard greens	5	0.5	Do not apply after the seedling stage.
Nectarines	5	3	60 days
Oats	N.R.	0.6	Do not apply after the heads start to form.
Onions	5	1	Do not apply to green or spring onions.*
Peaches	5	1	Paint or spray only the trunk and lower branches.
Peaches	5	3	60 days
Pears	5	1.5	60 days, or not after the edible parts start to form.
Peas	5	0.3	Do not apply after the pods start to form.

\*This restriction is based on the danger of off-flavor.



BHC (Technical)  
(1,2,3,4,5,6-hexachlorocyclohexane)

PRINCIPAL FORMULATIONS: Wettable powders containing 12%-36% gamma isomer; dusts containing 1%-3% gamma isomer; emulsifiable concentrates containing 2 lbs. gamma isomer per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A. of gamma isomer	
Peppers	5	0.4	Do not apply after the edible parts start to form.
Plums	5	1	Paint or spray only the trunk and lower branches.
Plums	5	3	60 days
Poultry	N.R.	Roost paint 1.5%	Treatment limited to the roosts. Do not use in houses where immature birds are kept.
Prunes	5	3	60 days
Spinach	5	0.4	Do not apply after the seedling stage.
Strawberries	5	2	Do not apply after the edible parts start to form.
Sugar beets	N.R.	0.3	Do not feed treated tops to dairy animals or animals being finished for slaughter.
Tomatoes	5	0.4	Do not apply after the edible parts start to form.
Walnuts	N.R.	3	Apply only one treatment. Do not apply after the nuts are over 1/2" in diameter.
Wheat	N.R.	0.6	Do not apply after the heads start to form.



BHC (Technical)  
(1,2,3,4,5,6-hexachlorocyclohexane)

PRINCIPAL FORMULATIONS: Wettable powders containing 12%-36% gamma isomer; dusts containing 1%-3% gamma isomer; emulsifiable concentrates containing 2 lbs. gamma isomer per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A. of gamma isomer	
Grass	Restrictive labeling	1.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Forage crops (All types of forage legumes)	Restrictive labeling	1	Do not feed treated forage to dairy animals or animals being finished for slaughter.



# BORDEAUX MIXTURE

PRINCIPAL FORMULATIONS: 12.75% metallic copper

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Almonds		17.6	
Apples		9.0	
Apricots		11.0	
Asparagus		2.2	
Beets		0.4	
Bushberries		6.6	
Carrots		0.4	
Celery		0.4	
Cherries	Exempt*	2.6	No time limitations*
Citrus		6.0	
Caneberries		6.6	
Cucurbits		0.4	
Eggplant		0.4	
Grapes		2.8	
Nectarines		11.0	
Peaches		11.0	
Pears		11.0	
Peppers		0.4	

\* Applies to all uses.



PRINCIPAL POSITIONS, 1917-1918

NAME		POSITION		SALARY	
LAST NAME		FIRST NAME		PER ANNUM	
BROWN		JOHN		\$100.00	
SMITH		JAMES		\$120.00	
JONES		WILLIAM		\$150.00	
WILLIAMS		EDWARD		\$180.00	
DAVIS		CHARLES		\$200.00	
MILLER		ALFRED		\$220.00	
WILSON		HAROLD		\$250.00	
MOORE		ROBERT		\$280.00	
MARTIN		LAWRENCE		\$300.00	
THOMAS		GEORGE		\$320.00	
HARRIS		FRANK		\$350.00	
CLARK		HERBERT		\$380.00	
ROBERTS		WALTER		\$400.00	
KELLY		JOHN		\$420.00	
NICHOLS		EDWARD		\$450.00	
CAMPBELL		ALFRED		\$480.00	
PETERSON		HAROLD		\$500.00	
ANDERSON		ROBERT		\$520.00	
GREEN		LAWRENCE		\$550.00	
BARNES		GEORGE		\$580.00	
HENDERSON		FRANK		\$600.00	
WATSON		HERBERT		\$620.00	
COOPER		WALTER		\$650.00	
RICHARDS		JOHN		\$680.00	
COWLEY		EDWARD		\$700.00	
WALKER		ALFRED		\$720.00	
HAYES		HAROLD		\$750.00	
MORRIS		ROBERT		\$780.00	
MCCOY		LAWRENCE		\$800.00	
MCCOY		GEORGE		\$820.00	
MCCOY		FRANK		\$850.00	
MCCOY		HERBERT		\$880.00	
MCCOY		WALTER		\$900.00	
MCCOY		JOHN		\$920.00	
MCCOY		EDWARD		\$950.00	
MCCOY		ALFRED		\$980.00	
MCCOY		HAROLD		\$1000.00	

BORDEAUX MIXTURE

PRINCIPAL FORMULATIONS: 12.75% metallic copper

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Plums	Exempt*	lbs./A. 11.0	No time limitations*
Potatoes		0.4	
Strawberries		2.6	
Tomatoes		0.4	

\* Applies to all uses.

NAME	ADDRESS	CITY	STATE
J. M. Smith	123 Main St	New York	NY
A. B. Jones	456 Oak Ave	Los Angeles	CA
C. D. Brown	789 Pine St	Chicago	IL
E. F. Green	101 Elm St	Boston	MA
G. H. White	202 Cedar St	San Francisco	CA
I. J. Black	303 Maple St	Philadelphia	PA
K. L. Gray	404 Birch St	Houston	TX
M. N. Hall	505 Spruce St	Portland	ME
O. P. King	606 Ash St	Seattle	WA
Q. R. Lee	707 Hickory St	Denver	CO
S. T. Scott	808 Walnut St	San Diego	CA
U. V. Walker	909 Chestnut St	New Orleans	LA

# BIPHENYL

PRINCIPAL FORMULATIONS: 1.75% impregnated wraps; 16.67% impregnated liners;  
25.103% impregnated pads

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.		
Grapefruit	110	1.75%	Impregnated fruit wrapper
		<u>or</u>	<u>or</u>
Lemons	110	25.10%	Impregnated pad, 2 pads per 4/5 bu. box
		<u>or</u>	<u>or</u>
Oranges	110	16.67%	Impregnated liners for boxes

Principal Formations of the Tertiary System in the United States

Geographic Area	Formation	Age	Remarks
Alabama	Trenton	Ordovician	Base of the Trenton Group
Alabama	Trenton	Ordovician	Middle of the Trenton Group
Alabama	Trenton	Ordovician	Top of the Trenton Group
Alabama	Trenton	Ordovician	Base of the Trenton Group
Alabama	Trenton	Ordovician	Middle of the Trenton Group
Alabama	Trenton	Ordovician	Top of the Trenton Group
Alabama	Trenton	Ordovician	Base of the Trenton Group
Alabama	Trenton	Ordovician	Middle of the Trenton Group
Alabama	Trenton	Ordovician	Top of the Trenton Group

## BUTOXY POLYPROPYLENE GLYCOL

PRINCIPAL FORMULATIONS: Smears and liquids containing 10%

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Cattle	N.R.		
Goats	N.R.	Liberal and free appli- cations to	Repeat as needed for screwworm control. *
Hogs	N.R.	wounds and	
Sheep	N.R.	abrasions	

\*Formulations containing other insecticides would be subject to their restrictions.



# CALCIUM ARSENATE

PRINCIPAL FORMULATIONS: 70% wettable powder; dusts containing 5% or more of active ingredient

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m. of combined As <sub>2</sub> O <sub>3</sub>	lbs./A.	
Asparagus	3.5	6	No application during cutting season.
Beans, dry	3.5	15	No time limitations.
Beans, lima	3.5	15	Do not apply after the edible parts start to form if beans are to be marketed in pods.
Beans, string	3.5	15	Do not apply after the edible parts start to form.
Beets	N.R.	20	Do not apply after seedling stage if tops are to be used for food.
Blackberries	3.5	20	Do not apply after the edible parts start to form.
Blackeyed peas	3.5	15	No warning if peas are shelled before marketing.
Blueberries	3.5	6	14 days for processed fruit; 30 days for fresh fruit.
Broccoli	3.5	25	Do not apply after the edible parts start to form.
Brussels sprouts	3.5	25	Do not apply after the edible parts start to form.
Cabbage	3.5	25	Do not apply after the edible parts start to form.
Carrots	3.5	20	No time limitations. Treated tops should not be used for food or feed.



REPORT OF THE BOARD OF DIRECTORS OF THE  
WILLIAM J. BERRY COMPANY FOR THE YEAR 1911

AMOUNTS PAID TO STOCKHOLDERS		AMOUNTS PAID TO DEBENTURE HOLDERS		AMOUNTS PAID TO OTHERS	
1911	1910	1911	1910	1911	1910
Dividend	100.00	100.00	100.00	100.00	100.00
Interest	100.00	100.00	100.00	100.00	100.00
Principal	100.00	100.00	100.00	100.00	100.00
Other	100.00	100.00	100.00	100.00	100.00
Total	400.00	400.00	400.00	400.00	400.00

CALCIUM ARSENATE

PRINCIPAL FORMULATIONS: 70% wettable powder, dusts containing 5% or more of active ingredient

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m. of combined As <sub>2</sub> O <sub>3</sub>	lbs./A.	
Cauliflower	3.5	25	Do not apply after the edible parts start to form.
Celery	3.5	25	Do not apply after the bunch begins to form or after celery is half grown.
Collards	3.5	25	Do not apply after seedling stage.
Cotton	N.R.	20	No time limitations.
Cucumbers	3.5	4	Do not apply after the edible parts start to form.
Eggplant	3.5	12	Do not apply after the edible parts start to form.
Huckleberries	3.5	6	14 days for processed fruit; 30 days for fresh fruit.
Kale	3.5	25	Do not apply after seedling stage.
Kohlrabi	3.5	20	Do not apply after the edible parts start to form.
Loganberries	3.5	20	Do not apply after the edible parts start to form.
Melons	3.5	4	No time limitations.
Mint	N.R.	25	Mint for salad use should not be treated.
Peppers	3.5	12	Remove excess residue at harvest.



CALCIUM ARSENATE

PRINCIPAL FORMULATIONS: 70% wettable powder, dusts containing 5% or more of active ingredient

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m. of combined As <sub>2</sub> O <sub>3</sub>	lbs./A.	
Potatoes	N.R.	25	No time limitations. (Foliage treatment).
Pumpkins	3.5	4	No time limitations.
Raspberries	3.5	20	Do not apply after the edible parts start to form.
Rutabagas	3.5	25	Do not apply after seedling stage if tops are to be used for food or feed.
Spinach	3.5	25	Do not apply after seedling stage.
Squash (Including summer squash)	3.5	4	No time limitations; remove excess residues at harvest.
Strawberries	3.5	6	Not after fruit begins to form.
Tomatoes	3.5	12	No time limitations; remove excess residues at harvest.
Turnips	3.5	25	Do not apply after seedling stage if tops are to be used for food or feed.

REMARKS: The subject is a member of the Communist Party of the United States of America.

DATE	NAME	ADDRESS	REMARKS
10/1/50	John Doe	123 Main St, New York, NY	Member of CP, active in local branch.
10/15/50	Jane Smith	456 Elm St, New York, NY	Member of CP, active in local branch.
11/1/50	Robert Johnson	789 Oak St, New York, NY	Member of CP, active in local branch.
11/15/50	Mary White	101 Pine St, New York, NY	Member of CP, active in local branch.
12/1/50	Charles Brown	202 Cedar St, New York, NY	Member of CP, active in local branch.
12/15/50	Elizabeth Black	303 Birch St, New York, NY	Member of CP, active in local branch.
1/1/51	William Green	404 Spruce St, New York, NY	Member of CP, active in local branch.
1/15/51	Patricia Gray	505 Willow St, New York, NY	Member of CP, active in local branch.
2/1/51	Thomas Hall	606 Ash St, New York, NY	Member of CP, active in local branch.
2/15/51	Lillian King	707 Hickory St, New York, NY	Member of CP, active in local branch.
3/1/51	George Lee	808 Sycamore St, New York, NY	Member of CP, active in local branch.
3/15/51	Barbara Scott	909 Magnolia St, New York, NY	Member of CP, active in local branch.
4/1/51	Frank Adams	1010 Poplar St, New York, NY	Member of CP, active in local branch.
4/15/51	Susan Baker	1111 Chestnut St, New York, NY	Member of CP, active in local branch.
5/1/51	Edward Miller	1212 Walnut St, New York, NY	Member of CP, active in local branch.
5/15/51	Carol Davis	1313 Elm St, New York, NY	Member of CP, active in local branch.
6/1/51	Harold Wilson	1414 Oak St, New York, NY	Member of CP, active in local branch.
6/15/51	Frances Moore	1515 Pine St, New York, NY	Member of CP, active in local branch.
7/1/51	Albert Taylor	1616 Cedar St, New York, NY	Member of CP, active in local branch.
7/15/51	Grace Young	1717 Birch St, New York, NY	Member of CP, active in local branch.
8/1/51	Raymond King	1818 Spruce St, New York, NY	Member of CP, active in local branch.
8/15/51	Norma Wright	1919 Willow St, New York, NY	Member of CP, active in local branch.
9/1/51	Clarence Hill	2020 Ash St, New York, NY	Member of CP, active in local branch.
9/15/51	Phyllis Green	2121 Hickory St, New York, NY	Member of CP, active in local branch.
10/1/51	Walter Scott	2222 Sycamore St, New York, NY	Member of CP, active in local branch.
10/15/51	Marjorie Adams	2323 Magnolia St, New York, NY	Member of CP, active in local branch.
11/1/51	Arthur Baker	2424 Poplar St, New York, NY	Member of CP, active in local branch.
11/15/51	Thelma Miller	2525 Chestnut St, New York, NY	Member of CP, active in local branch.
12/1/51	Harold King	2626 Walnut St, New York, NY	Member of CP, active in local branch.
12/15/51	Beatrice Davis	2727 Elm St, New York, NY	Member of CP, active in local branch.
1/1/52	Clarence Wilson	2828 Oak St, New York, NY	Member of CP, active in local branch.
1/15/52	Joseph Moore	2929 Pine St, New York, NY	Member of CP, active in local branch.
2/1/52	Elizabeth Taylor	3030 Cedar St, New York, NY	Member of CP, active in local branch.
2/15/52	Frank Young	3131 Birch St, New York, NY	Member of CP, active in local branch.
3/1/52	Grace King	3232 Spruce St, New York, NY	Member of CP, active in local branch.
3/15/52	Walter Scott	3333 Willow St, New York, NY	Member of CP, active in local branch.
4/1/52	Thelma Hill	3434 Ash St, New York, NY	Member of CP, active in local branch.
4/15/52	Harold Green	3535 Hickory St, New York, NY	Member of CP, active in local branch.
5/1/52	Beatrice Scott	3636 Sycamore St, New York, NY	Member of CP, active in local branch.
5/15/52	Clarence Adams	3737 Magnolia St, New York, NY	Member of CP, active in local branch.
6/1/52	Joseph Baker	3838 Poplar St, New York, NY	Member of CP, active in local branch.
6/15/52	Elizabeth Miller	3939 Chestnut St, New York, NY	Member of CP, active in local branch.
7/1/52	Frank King	4040 Walnut St, New York, NY	Member of CP, active in local branch.
7/15/52	Grace Davis	4141 Elm St, New York, NY	Member of CP, active in local branch.
8/1/52	Walter Wilson	4242 Oak St, New York, NY	Member of CP, active in local branch.
8/15/52	Thelma Moore	4343 Pine St, New York, NY	Member of CP, active in local branch.
9/1/52	Harold Taylor	4444 Cedar St, New York, NY	Member of CP, active in local branch.
9/15/52	Beatrice Young	4545 Birch St, New York, NY	Member of CP, active in local branch.
10/1/52	Clarence King	4646 Spruce St, New York, NY	Member of CP, active in local branch.
10/15/52	Joseph Scott	4747 Willow St, New York, NY	Member of CP, active in local branch.
11/1/52	Elizabeth Hill	4848 Ash St, New York, NY	Member of CP, active in local branch.
11/15/52	Frank Green	4949 Hickory St, New York, NY	Member of CP, active in local branch.
12/1/52	Beatrice Scott	5050 Sycamore St, New York, NY	Member of CP, active in local branch.
12/15/52	Clarence Adams	5151 Magnolia St, New York, NY	Member of CP, active in local branch.
1/1/53	Joseph Baker	5252 Poplar St, New York, NY	Member of CP, active in local branch.
1/15/53	Elizabeth Miller	5353 Chestnut St, New York, NY	Member of CP, active in local branch.
2/1/53	Frank King	5454 Walnut St, New York, NY	Member of CP, active in local branch.
2/15/53	Grace Davis	5555 Elm St, New York, NY	Member of CP, active in local branch.
3/1/53	Walter Wilson	5656 Oak St, New York, NY	Member of CP, active in local branch.
3/15/53	Thelma Moore	5757 Pine St, New York, NY	Member of CP, active in local branch.
4/1/53	Harold Taylor	5858 Cedar St, New York, NY	Member of CP, active in local branch.
4/15/53	Beatrice Young	5959 Birch St, New York, NY	Member of CP, active in local branch.
5/1/53	Clarence King	6060 Spruce St, New York, NY	Member of CP, active in local branch.
5/15/53	Joseph Scott	6161 Willow St, New York, NY	Member of CP, active in local branch.
6/1/53	Elizabeth Hill	6262 Ash St, New York, NY	Member of CP, active in local branch.
6/15/53	Frank Green	6363 Hickory St, New York, NY	Member of CP, active in local branch.
7/1/53	Beatrice Scott	6464 Sycamore St, New York, NY	Member of CP, active in local branch.
7/15/53	Clarence Adams	6565 Magnolia St, New York, NY	Member of CP, active in local branch.
8/1/53	Joseph Baker	6666 Poplar St, New York, NY	Member of CP, active in local branch.
8/15/53	Elizabeth Miller	6767 Chestnut St, New York, NY	Member of CP, active in local branch.
9/1/53	Frank King	6868 Walnut St, New York, NY	Member of CP, active in local branch.
9/15/53	Grace Davis	6969 Elm St, New York, NY	Member of CP, active in local branch.
10/1/53	Walter Wilson	7070 Oak St, New York, NY	Member of CP, active in local branch.
10/15/53	Thelma Moore	7171 Pine St, New York, NY	Member of CP, active in local branch.
11/1/53	Harold Taylor	7272 Cedar St, New York, NY	Member of CP, active in local branch.
11/15/53	Beatrice Young	7373 Birch St, New York, NY	Member of CP, active in local branch.
12/1/53	Clarence King	7474 Spruce St, New York, NY	Member of CP, active in local branch.
12/15/53	Joseph Scott	7575 Willow St, New York, NY	Member of CP, active in local branch.
1/1/54	Elizabeth Hill	7676 Ash St, New York, NY	Member of CP, active in local branch.
1/15/54	Frank Green	7777 Hickory St, New York, NY	Member of CP, active in local branch.
2/1/54	Beatrice Scott	7878 Sycamore St, New York, NY	Member of CP, active in local branch.
2/15/54	Clarence Adams	7979 Magnolia St, New York, NY	Member of CP, active in local branch.
3/1/54	Joseph Baker	8080 Poplar St, New York, NY	Member of CP, active in local branch.
3/15/54	Elizabeth Miller	8181 Chestnut St, New York, NY	Member of CP, active in local branch.
4/1/54	Frank King	8282 Walnut St, New York, NY	Member of CP, active in local branch.
4/15/54	Grace Davis	8383 Elm St, New York, NY	Member of CP, active in local branch.
5/1/54	Walter Wilson	8484 Oak St, New York, NY	Member of CP, active in local branch.
5/15/54	Thelma Moore	8585 Pine St, New York, NY	Member of CP, active in local branch.
6/1/54	Harold Taylor	8686 Cedar St, New York, NY	Member of CP, active in local branch.
6/15/54	Beatrice Young	8787 Birch St, New York, NY	Member of CP, active in local branch.
7/1/54	Clarence King	8888 Spruce St, New York, NY	Member of CP, active in local branch.
7/15/54	Joseph Scott	8989 Willow St, New York, NY	Member of CP, active in local branch.
8/1/54	Elizabeth Hill	9090 Ash St, New York, NY	Member of CP, active in local branch.
8/15/54	Frank Green	9191 Hickory St, New York, NY	Member of CP, active in local branch.
9/1/54	Beatrice Scott	9292 Sycamore St, New York, NY	Member of CP, active in local branch.
9/15/54	Clarence Adams	9393 Magnolia St, New York, NY	Member of CP, active in local branch.
10/1/54	Joseph Baker	9494 Poplar St, New York, NY	Member of CP, active in local branch.
10/15/54	Elizabeth Miller	9595 Chestnut St, New York, NY	Member of CP, active in local branch.
11/1/54	Frank King	9696 Walnut St, New York, NY	Member of CP, active in local branch.
11/15/54	Grace Davis	9797 Elm St, New York, NY	Member of CP, active in local branch.
12/1/54	Walter Wilson	9898 Oak St, New York, NY	Member of CP, active in local branch.
12/15/54	Thelma Moore	9999 Pine St, New York, NY	Member of CP, active in local branch.

CALCIUM CYANIDE<sup>1/</sup>

PRINCIPAL FORMULATIONS: Technical material

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Barley	p.p.m. (as HCN)	lbs./1000 bu.	
Buckwheat			
Corn			
Oats	25*	8.6*	No time limitations*
Rice			
Rye			
Sorghum			
Wheat			

<sup>1/</sup> Grain fumigant use

\*Applies to all uses.



CAPTAN  
(N-trichloromethylmercapto-4-cyclohexene-1:2-dicarboximide)

PRINCIPAL FORMULATIONS: 50% wettable powder;  
75% wettable powder (seed treatment only);  
5.0%, 7.5%, 10.0%, and 20.0% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	20	5	Cover sprays - no time limitations
Apricots	20	5	7 days
Asparagus	N.R.	3 lbs./100 gal.	Preplanting root dip
Cabbage	N.R.	1 oz./100 lbs.	Seed treatment
Cantaloupes	20	3	No time limitations
Cherries	20	10	7 days
Cucumbers	20	3	No time limitations
Eggplant	20	3	No time limitations
Grapefruit	20	10	Application only to the skirts of trees prior to winter rains
Lemons	20	10	Application only to the skirts of trees prior to winter rains
Limes	20	10	Application only to the skirts of trees prior to winter rains
Oranges	20	10	Application only to the skirts of trees prior to winter rains
Mangoes	20	10	Cover sprays - no time limitations
Peaches	20	5	7 days
Pears	20	5	Cover sprays - no time limitations
Peppers	20	3	No time limitations





CAPTAN  
(N-trichloromethylmercapto-4-cyclohexene-1:2-dicarboximide)

PRINCIPAL FORMULATIONS: 50% wettable powder;  
75% wettable powder (seed treatment only);  
5.0%, 7.5%, 10.0%, and 20.0% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Pineapples	20	10	4 months before harvest
Potatoes	N.R.	3	Foliage treatment only
	N.R.	1/2 lb./bu. of cut seed potatoes	Seed piece treatment only
Pumpkins	20	3.75	No time limitations
Squash	20	3	No time limitations
Strawberries	20	3	Not within 3 days of picking
Tangerines	20	10	Application only to skirts of trees prior to winter rains
Tomatoes	20	4	No time limitations
Watermelons	20	3	No time limitations



- 3 -

CAPTAN

(N-trichloromethylmercapto-4-cyclohexene-1:2-dicarboximide)

PRINCIPAL FORMULATIONS: 50% wettable powder;  
75% wettable powder (seed treatment only);  
5.0%, 7.5%, 10.0%, and 20.0% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Beets	P.P.M.	LBS./A.	
Corn			
Cotton			
Cucurbits	N.R.*	3.3*	Soil treatment only. Apply to soil before planting*
Grains			
Soybeans			
Spinach			
Vegetables			

\*Applies to all uses in this group



CARBON DISULFIDE <sup>1/</sup>

PRINCIPAL FORMULATIONS: Technical material, usually mixed with carbon tetrachloride in order to reduce the fire hazard

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Barley	Exempt*	gals./1000 bu.	No time limitations*
Corn			
Oats			
Popcorn		1.6*	
Rice			
Rye			
Sorghum (Milo)			
Wheat			

<sup>1/</sup> Grain fumigant use  
 \* Applies to all uses.



CARBON TETRACHLORIDE<sup>1/</sup>

PRINCIPAL FORMULATIONS: Technical material, employed usually in mixtures containing up to 80% CCl<sub>4</sub> with other grain fumigants

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Barley	Exempt*	gals./1000 bu.	No time limitations*
Corn			
Oats			
Rice		10*	
Rye			
Sorghum (Milo)			
Wheat			

<sup>1/</sup> Grain fumigant use

\* Applies to all uses.





2-chloro,<sup>CDA</sup>N,N-diallyl acetamide

PRINCIPAL FORMULATIONS: 48.8% emulsifiable concentrate

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Beans (lima and snap)	N.R.*	lbs./A. 4	Pre-emergence use only*
Corn (field, pop, sweet, and hybrid seed)		4	
Onions (seeded)		6	
Peas		4	
Soybeans (certified seed)		2	

\*Applies to all uses.



CDEC  
2-chloroallyl diethyldithiocarbamate

PRINCIPAL FORMULATIONS: 49.9% emulsifiable concentrate containing 4 lbs.  
per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Beans, lima and snap	N.R.	6	Pre-emergence or immediately after planting
Beets	N.R.	6	Pre-emergence or immediately after planting
Cole crops, including broccoli, Brussels sprouts, cabbage, cauliflower	N.R.	4	Pre-emergence or immediately after planting
		8	Pre-planting or just prior to setting plants
Celery	N.R.	8	Pre-planting application only
Collards	N.R.	4	Pre-emergence application only
Corn, field or sweet	N.R.	6	Pre-emergence application only
Hanover salad	N.R.	4	Pre-emergence application only
Mustard greens	N.R.	4	Pre-emergence application only
Soybeans	N.R.	6	Pre-emergence application only
Spinach	N.R.	4	Pre-emergence application only
Turnips	N.R.	4	Pre-emergence application only



CHLORANIL <sup>1/</sup>  
Tetrachloro-*p*-benzoquinone

PRINCIPAL FORMULATIONS: 48%, 92%, and 96% wettable powders;  
5%, 10%, and 50% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Corn	N.R.*	2.0 oz./bu.	Seed treatment only. Do not use treated seed for food or feed.*
Cotton		3.0 oz./100 lbs.	
Forage crops		3.3 oz./bu.	
Oats		2.0 oz./bu.	
Rice		2.0 oz./bu.	
Sorghum		2.0 oz./bu.	
Vegetables	N.R.	6.0 oz./100 lbs.	Plant bed soil treatment
Celery		.8 lbs./A.	
Sweetpotatoes		1 lb./8 gals. water	

<sup>1/</sup> Common name for the active ingredient in "Sperguson," a proprietary product of the U. S. Rubber Company

\* Applies to all uses in this group.



CHLORDANE

1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 2, 4, or 6 lbs.<sup>1/</sup> per gallon; 40% wettable powder; 5%-10% dusts or granular formulations; 0.5%-2% fertilizer mixtures; 2%-3% pressurized sprays

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	0.3	8	30 days
Apricots	0.3	8	30 days
Asparagus	N.R.	0.5	Post-cutting use only.
Beans	0.3	<sup>2/</sup> 2	Do not apply to green or snap beans after pod starts to form.
Beets	0.3	10	Do not apply after seedling stage if tops are to be used for food.
Blackberries	0.3	10	Apply only before blooming and after harvest.
Blackeyed peas	0.3	2	No application after the pods begin to form.
Broccoli	N.R.	2	Do not apply after the edible parts start to form.
Blueberries	0.3	10	Do not apply while fruit is present.
Brussels sprouts	N.R.	2	Do not apply after the edible parts start to form.
Cabbage	N.R.	2	Do not apply after the edible parts start to form.
Carrots	0.3	2	No limitation. Warning against use of tops for food or feed is needed if foliage use is included.
Cauliflower	N.R.	2	Do not apply after the edible parts start to form.

<sup>1/</sup> Also 8 lbs. per gallon

<sup>2/</sup> 10 lbs./A. for soil treatment up to 2 weeks after seedling emergence





CHLORDANE

1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 2, 4, or 6 lbs.<sup>1/</sup> per gallon; 40% wettable powder; 5%-10% dusts or granular formulations; 0.5%-2% fertilizer mixtures; 2%-3% pressurized sprays

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Celery	0.3	2	Not after bunch begins to form or when plants are half grown.
Celery	0.3	10	Soil application at planting time or around base of plant before edible parts start to form.
Citrus fruits	0.3	2.5	2 weeks - applied primarily to ground under trees as well as to the trunks and larger branches.
Collards	N.R.	2	Do not apply after the edible parts start to form.
Corn	0.3	2	Do not feed treated forage to dairy animals or animals being fattened for slaughter.
Corn, sweet	N.R.	1.5	Applied primarily to silks. Do not feed treated forage to dairy animals or animals being fattened for slaughter.
Cucumbers	0.3	1.5	Do not apply after the edible parts start to form.
Eggplant	0.3	1.2	Do not apply after the edible parts start to form.
Grapes	0.3	10	Soil application before fruit forms.
Kale	N.R.	2	Do not apply after the edible parts start to form.
Kohlrabi	N.R.	2	Do not apply after the edible parts start to form.

<sup>1/</sup> Also 8 lbs. per gallon



CHLORDANE

1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexachloro-4,7-methanoindene

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 2, 4, or 6 lbs.<sup>1/</sup> per gallon; 40% wettable powder; 5%-10% dusts or granular formulations; 0.5%-2% fertilizer mixtures; 2%-3% pressurized sprays

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Lettuce	0.3	2	Do not apply after the edible parts start to form.
Loganberries	0.3	10	Soil application before fruit forms.
Melons	0.3	1.5	Do not apply after the edible parts start to form.
Nectarines	0.3	8	30 days
Okra	0.3	2	Do not apply after the edible parts start to form.
Onions	0.3	10	Do not use on green or spring onions.
Peas	0.3	1.5	Do not apply within 15 days of harvest. Do not feed treated forage to dairy animals or animals being finished for slaughter.
Peaches	0.3	8	30 days
Peanuts	0.3	10	Soil applications before planting or as late as pegging.
Pears	0.3	8	30 days
Peppers	0.3	10	Do not apply after the edible parts start to form.
Pineapples	0.3	2	Do not feed bran or husks to live-stock.
Potatoes	0.3	10	Soil treatment only.
	N.R.	1.5	Foliage application only; no time limitations.

<sup>1/</sup> Also 8 lbs. per gallon



CHLORDANE

1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexachloro-4,7-methanoindene

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 2, 4, or 6 lbs. <sup>1/</sup> per gallon; 40% wettable powder; 5%-10% dusts or granular formulations; 0.5%-2% fertilizer mixtures; 2%-3% pressurized sprays

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Quinces	0.3	8	30 days
Radishes	N.R.	2	Do not apply after the edible parts start to form.
Raspberries	0.3	10	Apply only before blooming and after harvest.
Roadsides, ditches, field margins	0.3	3	Do not graze dairy animals or animals being finished for slaughter.
Rutabagas	N.R.	2	Do not apply after the edible parts start to form.
Small grains	N.R.	3	Do not apply after the heads start to form. Do not allow grazing in treated fields.
Squash	0.3	1.5	Do not apply after the edible parts start to form.
Strawberries	0.3	10	Do not apply after the edible parts start to form.
Sugar cane	N.R.	5	Apply to seed pieces in furrow.
Summer squash	0.3	1.5	Do not apply after the edible parts start to form.
Sweetpotatoes	0.3.	5	Apply to seed pieces in furrow.
Turnips	N.R.	2	Do not apply after the edible parts start to form.

1/ Also 8 lbs. per gallon



CHLORDANE

1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexachloro-4,7-methanoindene

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 2, 4, 6, or 8 lbs. per gallon; 40% wettable powder; 5%-10% dusts or granular formulations; 0.5%-2% fertilizer mixtures; 2%-3% pressurized sprays

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Alfalfa and clover	Restrictive labeling	2	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not use on for- age to be sold commercially or to be shipped interstate.
Forage legumes Cowpeas Soybeans Velvet beans Vetch	Restrictive labeling	2	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Grass, pasture and range	Restrictive labeling	3.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Alfalfa Clover Corn Cowpeas Lespedeza Sorghum Soybeans	N.R.*	10*	Preplanting application only*

\* Applies to all uses in this group.





CHLOROBENZILATE  
(Ethyl 4,4'-dichlorobenzilate)

PRINCIPAL FORMULATIONS: 25% emulsifiable concentrate; 25% wettable powder;  
4% dust; 10% pressurized spray

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	5	5	14 days
Cantaloupes	5	1.6	No time limitations
Cherries	N.R.	4	No application should be made until after the fruit has been harvested.
Lemons	5	4	No time limitations
Oranges	5	4	No time limitations
Pears	5	5	7 days



CHLOROPICRIN<sup>1/</sup>  
(Trichloronitromethane)

PRINCIPAL FORMULATIONS: 99% technical material

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Soil fumigant for:		lbs./A.	
Celery seed beds	N.R.	958	2 weeks pre-planting treatment; disc or aerate before planting.
Seed beds	N.R.	482	2 weeks pre-planting treatment; disc or aerate before planting.
Strawberries	N.R.	482	2 weeks pre-planting treatment; disc or aerate before planting.

1/ Soil fumigant use



CHLORTHION

O-(3-chloro-4-nitrophenyl) O,O-dimethyl phosphorothioate

PRINCIPAL FORMULATIONS: 3% dust; 25% wettable powder; emulsifiable concentrate containing 4 lbs. per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Cotton	N.R.	lbs./A. 1.0	No time limitations. Do not feed cotton trash to dairy animals or animals being finished for slaughter for 5 days after last treatment.



CIPC  
Isopropyl N-(3-chlorophenyl) carbamate

PRINCIPAL FORMULATIONS: 33% and 47% liquids; 4%, 5%, 8%, and 10% granular formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Celery	N.R.	7.0	Post-emergence when crop is set in field, 100-130 days pre-harvest.
Collards	N.R.	2.0	Pre-emergence, 75-100 days pre-harvest.
Cotton	N.R.	9.0	Pre-emergence, 130-160 days pre-harvest.
		2.0	Post-emergence, 90-110 days pre-harvest.
		7.5 (granular form)	Post-emergence, soon after emergence.
Hanover salad (smooth kale)	N.R.	2.0	Pre-emergence, 75-100 days pre-harvest.
Kale	N.R.	2.0	Pre-emergence, 55-65 days pre-harvest.
Lettuce	N.R.	3.0	Pre-emergence, 45-80 days pre-harvest.
Onions (seeded)	N.R.	8.0	Pre-emergence, 95-120 days pre-harvest.
		8.0	Post-emergence, 30 days pre-harvest.
Onions (set)	N.R.	6.0	Same day onions are set.
Peas	N.R.	4.0	Pre-planting, 2 days before planting
		6.0	Pre-emergence at planting.





Isopropyl N-(3-chlorophenyl) carbamate

PRINCIPAL FORMULATIONS: 33% and 47% liquids; 4%, 5%, 8%, and 10% granular formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Spinach	N.R.	2.0	Pre-emergence after seeding.
Strawberries	N.R.	3.0	Fall application (dormant)
		2.0	Growing season - 2 weeks after planting, before runners set. Do not apply during flowering or fruiting. Do not apply to ever-blooming varieties.
Sugar beets	N.R.	6.0	Pre-emergence, 160-215 days pre-harvest.
Sweet potatoes	N.R.	2.0 (granular only)	Post-emergence, at lay-by, 30-45 days pre-harvest.
Tomatoes	N.R.	4.0 (granular only)	Post-emergence, at lay-by, 30-45 days pre-harvest.
Turnip greens	N.R.	2.0	Pre-emergence, after seeding.
Upland cress	N.R.	2.0	Pre-emergence, after seeding.



COPPER (Ammoniacal)

PRINCIPAL FORMULATIONS: 3.25% Liquid

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Apples	Exempt*	0.4	No time limitations*
Avocados		0.75	
Citrus		0.4	
Gooseberries		0.3	
Grapes		0.3	
Mangoes		0.75	
Peaches		0.4	
Pears		0.4	
Tomatoes		0.3	

\*Applies to all uses.



## COPPER ARSENATE

PRINCIPAL FORMULATIONS: Customarily marketed as 91% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m. of combined $\text{As}_2\text{O}_3$	lbs./A.	
Brussels sprouts	3.5	8	Do not apply after the heads begin to form
Cabbage	3.5	8	Do not apply after the heads begin to form
Carrots	3.5	8	No time limitations
Cauliflower	3.5	8	Do not apply after the curd begins to form
Kohlrabi	3.5	8	Do not apply after the edible parts begin to form
Tomatoes	3.5	15	30 days



# COPPER CARBONATE

PRINCIPAL FORMULATIONS: 20% and 50% powders

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		oz./bu.	
Sorghum	Exempt	2	Seed treatment only
Wheat	Exempt	2	Seed treatment only





# COPPER LIME MIXTURES

PRINCIPAL FORMULATIONS: Copper, as metallic  
 3.0% 6.0% 8.75%  
 5.2% 7.0%

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Almonds		2.8	
Apples		3.0	
Apricots		2.8	
Beets		2.8	
Carrots		2.8	
Celery		2.8	
Cherries		2.8	
Citrus		3.0	
Cucurbits	Exempt*	2.8	No time limitations*
Eggplant		2.8	
Grapes		3.0	
Nectarines		2.8	
Peaches		2.8	
Pears		2.8	
Peppers		2.8	
Potatoes		2.8	
Tomatoes		2.8	
Walnuts		2.8	

\*Applies to all uses.



# COPPER OLEATE

PRINCIPAL FORMULATIONS: 1% and 2% liquids

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Muskmelons	N.R.*	lbs. copper/A. 1.5	According to local agricultural authorities*
Pumpkins		2.8	
Squash		2.8	

\*Applies to all uses.



COPPER RESINATE (20%) PLUS PHENYL MERCURY SALICYLATE (2%)

PRINCIPAL FORMULATIONS: Mixture of technical materials with inert diluents

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Wheat	N.R.	1/2 oz./bu.	Seed treatment



# COPPER SULPHATE (Basic)

PRINCIPAL FORMULATIONS: 12.75%, 19%, 26%, 35%, and 53% wettable powders;  
6% and 7% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Almonds	Exempt	6.4	Swelling bud and popcorn stage
Apples	Exempt	3.2 6.4	Delayed dormant Just before harvest
Apricots	Exempt	6.4	Red bud and pre-jacket sprays
Avocados	Exempt	16.0	140 days after bloom
Beans	Exempt	3.2	7-10 day interval (close to harvest)
Beets	Exempt	4.0	7-10 day interval (close to harvest)
Brambles	Exempt	2.6	7-10 day interval (close to harvest)
Bush fruits	Exempt	1.4	May be applied close to harvest
Carrots	Exempt	4.0	7-10 day interval (close to harvest)
Celery	Exempt	5.2	7-10 day interval (close to harvest)
Cherries	Exempt	2.8	White bud stage and in late bloom
Citrus	Exempt	2.4	Dormant season and 3 weeks after petal fall
Cole crops	Exempt	3.2	7-10 day interval (close to harvest)
Cucurbits	Exempt	5.2	7-10 day interval (close to harvest)
Currants	Exempt	2.6	7-10 day interval (close to harvest)
Eggplant	Exempt	5.2	7-10 day interval (close to harvest)
Gooseberries	Exempt	2.6	7-10 day interval (close to harvest)





COPPER SULPHATE (Basic)

PRINCIPAL FORMULATIONS: 12.75%, 19%, 26%, 35%, and 53% wettable powders;  
6% and 7% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Grapes	Exempt	1.4	Complete schedule (Close to harvest)
Hops	Exempt	5.2	7-10 day interval (close to harvest)
Lettuce	Exempt	3.2	7-10 day interval (close to harvest)
Mangoes	Exempt	8.0	84 days after bloom
Nectarines	Exempt	8.5	Nov. 15-30 and in spring before buds swell and in full pink
Onions	Exempt	5.2	7-10 day interval (close to harvest)
Peaches	Exempt	8.5	Nov. 15-30 and in spring before buds swell and in full pink
Peanuts	Exempt	6.4	2-week intervals (close to harvest)
Pears	Exempt	8.0	Late cover sprays
Peas	Exempt	5.2	7-10 day interval (close to harvest)
Peppers	Exempt	5.2	7-10 day interval (close to harvest)
Plums	Exempt	6.4	Green bud stage and popcorn stage
Potatoes	Exempt	6.4	7-10 day interval (close to harvest)
Prunes	Exempt	6.4	Green bud stage and popcorn stage
Radishes	Exempt	3.2	7-10 day interval (close to harvest)
Soybeans	Exempt	5.2	2-week intervals (close to harvest)
Spinach	Exempt	3.2	7-10 day interval (close to harvest)



COPPER SULPHATE (Basic)

PRINCIPAL FORMULATIONS: 12.75%, 19%, 26%, 35%, and 53% wettable powders;  
6% and 7% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Strawberries	Exempt	4.0	Pre-blossom and post-harvest
Sugar beets	Exempt	6.4	7-10 day interval (close to harvest)
Tomatoes	Exempt	6.4	7-10 day interval (close to harvest)



## COPPER-TETRA COPPER CALCIUM OXYCHLORIDE

PRINCIPAL FORMULATIONS: 45% wettable powders; 10% and 15% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Almonds	N.R.	22	Apply as a dormant spray in the fall and before buds break in spring.
Apricots	N.R.	22	Apply as a dormant spray in the fall and before buds break in spring.
		12.3	Apply during bloom period only.
Peaches	N.R.	12.3	Apply as a dormant spray in the fall and before buds break in spring.
		12.3	Apply during bloom period only.
Plums	N.R.	12.3	Apply during bloom period only.
Prunes	N.R.	12.3	Apply during bloom period only.
Walnuts	N.R.	12	Early pre-bloom applications, 3-6 treatments at 7-day intervals (120 days pre-harvest)



COPPER ZINC CHROMATE (Complex)

PRINCIPAL FORMULATIONS: 20%, 89%, and 95% wettable powders;  
3%, 5.7%, 6%, and 8% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Avocados		19	
Celery		1.9	
Citrus		9.5	
Grapes	Exempt*	1.9	Consult local authorities.*
Peanuts		1.9	
Potatoes		1.9	
Tomatoes		1.9	
Cucurbits	Exempt	3	Apply at 7-14 day intervals. (Close to harvest)

\*Applies to all uses in this group.





CRYOLITE  
Sodium fluoaluminate

PRINCIPAL FORMULATIONS: Pure substance either from natural sources or from synthetic manufacture. Finished formulations are ordinarily in the form of dusts ranging from about 20% to 100%. Sprays are rarely encountered.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Beans	p.p.m. of combined fluorine	lbs./A.	Remove excess residue by washing or brushing or do not apply to leafy vegetables after formation of the edible leaves.*
Beets			
Blackeyed peas			
Broccoli			
Brussels sprouts			
Cabbage			
Carrots			
Cauliflower	7*	50*	
Collards			
Cucumbers			
Eggplants			
Kale			
Kohlrabi			
Lettuce			
Mustard greens			
Okra			
Peas			
Peppers			

\* Applies to all uses.



CRYOLITE  
Sodium fluoaluminate

PRINCIPAL FORMULATIONS: Pure substance either from natural sources or from synthetic manufacture. Finished formulations are ordinarily in the form of dusts ranging from about 20% to 100%. Sprays are rarely encountered.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Radishes	p.p.m. of combined fluorine  7*	lbs./A.  50*	Remove excess residue by washing or brushing or do not apply to leafy vegetables after formation of the edible leaves.*
Rutabagas			
Squash			
Summer squash			
Tomatoes			
Turnips	7*	60*	Do not apply after the fruit starts to form.*
Small Fruits			
Blackberries			
Grapes			
Loganberries			
Raspberries			
Strawberries			

\* Applies to all uses in this group.



CRYOLITE  
Sodium fluoaluminate

PRINCIPAL FORMULATIONS: Pure substance either from natural sources or from synthetic manufacture. Finished formulations are ordinarily in the form of dusts ranging from about 20% to 100%. Sprays are rarely encountered.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Tree Fruits	p.p.m. of combined fluorine	lbs./A.	
Apples			
Apricots			
Peaches	7*	80*	Remove excess residues by washing or brushing.*
Pears			
Plums			
Prunes			
Citrus fruits	7	80	No time limitations
Sugar cane	N.R.	10	No time limitations
Walnuts	N.R.	30	No time limitations

\* Applies to all uses in this group.



# CUPROUS OXIDE

PRINCIPAL FORMULATIONS: 25.0% and 90.0% powder; 4.5%, 8.3%, and 9.0% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Almonds	Exempt*	7.2	Apply in popcorn stage and repeat when trees are in half bloom (105-120 days from harvest)
Apricots		4.5	Apply in late fall and repeat in spring (125-135 days from harvest)
Beans		2	Apply at 7-10 day intervals (close to harvest)
Beets		2	Apply at 7-10 day intervals (close to harvest)
Celery		2	Apply at 7-10 day intervals (close to harvest)
Cherries		4.5	Begin application 2 weeks after shuck shed - 1 week later and 7-10 days later (25-35 days from harvest)
Citrus		4.5	Complete spray schedule (close to harvest)
Cucumbers		2	Apply at 7-10 day intervals (close to harvest)
Currants		2.3	Apply just after blossoming (50-60 days from harvest). Post-harvest application also
Eggplants		2	Apply at 7-10 day intervals (close to harvest)
Garlic		2	Apply at 7-10 day intervals (close to harvest)

\*Applies to all uses.





CUPROUS OXIDE

PRINCIPAL FORMULATIONS: 25.0% and 90.0% powder; 4.5%, 8.3% and 9.0% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Grapes	Exempt*	2.3	Start application before bloom and continue until grapes are about the size of buckshot (60-70 days from harvest)
Lettuce		2.3	Apply at 7-10 day intervals (close to harvest)
Melons		2	Apply at 7-10 day intervals (close to harvest)
Onions		2	Apply at 7-10 day intervals (close to harvest)
Peaches		4.5	Apply in late fall and repeat in spring (125-135 days from harvest)
Peppers		2	Apply at 7-10 day intervals (close to harvest)
Potatoes		3.4	Apply at 7-10 day intervals (close to harvest)
Tomatoes		3.4	Apply at 7-10 day intervals (close to harvest)
Walnuts		8.0	Begin at pre-bloom - 3 additional sprays during early formation of nuts (140-150 days from harvest)

\*Applies to all uses.



CUPROUS OXIDE

PRINCIPAL FORMULATIONS: 25.0% and 90.0% powder; 4.5%, 8.3%, and 9.0% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Seed treatment			
Cucumbers			
Melons	N.R.*	3 oz./100 lbs. seed*	Seed treatment only*
Peas			
Large seeded vegetables			
Seed treatment			
Alfalfa			
Beets			
Celery			
Clover			
Eggplants	N.R.*	1.5 lb./100 lbs. seed*	Seed treatment only*
Grasses			
Lettuce			
Peppers			
Spinach			
Sugar beets			
Tomatoes			

\* Applies to all uses in this group.



CYANO (METHYLMERCURI) GUANIDINE

PRINCIPAL FORMULATIONS: 0.6%, 2.2%, and 6.3% liquids

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		Fl./oz. actual chemical	
Barley		0.02/bu.	
Cotton		0.05-0.1/100 lbs.	
Flax		0.032/bu.	
Oats	N.R.*	0.02/bu.	Seed treatment by slurry or liquid treater*
Rice		0.009/100 lbs.	
Rye		0.02/bu.	
Sorghum		0.02/bu.	
Sugar beets		0.09/100 lbs.	
Wheat		0.02/bu.	

\* Applies to all uses in this group.



2,4-D  
(2,4-dichlorophenoxy acetic acid)

PRINCIPAL FORMULATIONS: 80% to 90% sodium, 93% amine wettable powders; 18.4% to 98% emulsifiable concentrates; 2% to 12.5% "volatile" dusts; 40% to 98% "volatile" emulsifiable concentrates; 54% to 75.5% "low volatile" emulsifiable concentrates; 31.9% 2,4-D acid (liquid) and 39.1% 2,4-D acid (paste)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Asparagus	N.R.	2.0	After post-harvest disking.
Barley	N.R.	1.0	Post-emergence, 50 days pre-harvest.
Clover, ladino	N.R.	0.73	Use for seed production only.
Corn (field)	N.R.	2.0	Pre-emergence
		0.5	Post-emergence when 10-18" high, 115-170 days pre-harvest.
Corn (pop)	N.R.	0.5	Post-emergence when 3" high, 115-125 days from harvest.
Corn (sweet)	N.R.	1.5	Pre-emergence, 80-100 days pre-harvest.
		0.5	Post-emergence when 8-18" high, 50-80 days pre-harvest.
Flax	N.R.	0.5	Post-emergence before bud stage, 100-125 days pre-harvest.
Milo	N.R.	2.0	Pre-emergence, 120-150 days pre-harvest.
Oats	N.R.	1.0	Post-emergence, 50 days pre-harvest.
Potatoes	N.R.	2.0	Pre-emergence
Raspberries	N.R.	0.5	Apply to 1st year and non-fruiting stands. Do not apply to growing tips, flowers or fruiting canes.
Rice	N.R.	1.25	Post-emergence, 125-175 days pre-harvest.





-2-  
2,4-D  
(2,4-dichlorophenoxy acetic acid)

PRINCIPAL FORMULATIONS: 80% to 90% sodium, 93% amine wettable powders; 18.4% to 98% emulsifiable concentrates; 2% to 12.5% "volatile" dusts; 40% to 98% "volatile" emulsifiable concentrates; 54% to 75.5% "low volatile" emulsifiable concentrates; 31.9% 2,4-D acid (liquid) and 39.1% 2,4-D acid (paste)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Rice	N.R.	1.5	3-5 days after, 80-110 days pre-harvest. No ester formulations.
Rye	N.R.	1.0	Post-emergence, tillerage to joint stage, 50 days pre-harvest.
Sorghum	N.R.	2.0	Pre-emergence, 120-150 days pre-harvest.
Strawberries	N.R.	1.5	Dormant season, before blossoming.
		1.5	After picking, before runners form.
Sugar cane	N.R.	2.0	Pre-emergence
		2.0	Post-emergence, cane 1-2 ft. tall. After lay-by no ester formulations.
Wheat	N.R.	1.0	Post-emergence, tillerage to joint stage, 50 days pre-harvest.



DALAPON  
(Sodium salt of 2,2-dichloropropionic acid)

PRINCIPAL FORMULATIONS: 85% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Cotton	35 on cottonseed (as the acid)	3.7	At lay-by. Cover soil - avoid wetting cotton.
		1 lb./5 gals. water	Spot treatment. Avoid application to foliage.
Sugar beets and beet tops	5 (as the acid)	4.5	Post-emergence - up to 2-4 leaf stage. Reduce rate for band treat- ment.
Sugar cane	N.R.	3.7	Apply on drill row after grasses are well established (6-24 months pre-harvest).



DDT  
1,1,1-trichloro-2,2-bis (p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate;  
5% dust; 10% aerosols

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Alfalfa and clover	Restrictive labeling	2.5	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not use on for- age to be sold commercially or to be shipped interstate.
Almonds	N.R.	8.0	No time limitations. Do not use treated almond hulls for food or feed.
Apples	7	8.0	For 5 applications - 30 days
Apricots	7	8.0	42 days
Artichokes	7	2.5	Do not apply after the edible parts start to form.
Asparagus	7	3.0	Do not use during cutting season.
Avocados	7	3.0	30 days
Barley	N.R.	2.5	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not apply after the heads start to form.
Beans (green and lima)	7	2.0	7 days
Beets	7	2.5	Do not apply after seedling stage if tops are to be used for food or feed.
Blackberries	7	2.0	Do not apply after the edible parts start to form.
Blueberries	7	2.5	Apply only before fruit starts to form or after harvest.



DDT  
1,1,1-trichloro-2,2-bis (p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate;  
5% dust; 10% aerosols

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Boysenberries	N.R.	2.0	Do not apply after the edible parts start to form.
Broccoli	7	2.5	Do not apply after the edible parts start to form.
Brussels sprouts	7	2.5	Do not apply after the edible parts start to form.
Cabbage	7	2.5	Do not apply after the edible parts start to form (14 days if outer leaves are removed at harvest).
Carrots	7	2.5	Do not use treated tops for food or feed.
Cauliflower	7	2.5	Do not apply after the edible parts start to form.
Celery	7	2.5	Do not apply after bunching or when celery is half-grown.
Cherries	7	8.0	30 days
Chestnuts	N.R.	8.0	No time limitations
Collards	7	2.5	Do not apply after seedling stage (21 days on greens intended for processing).
Corn (field)	N.R.	2.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.





1,1,1-trichloro-2,2-bis (p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate;  
5% dust; 10% aerosols

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Corn (field)	N.R.	1.5	Granular formulation only. Do not feed treated forage to dairy animals. Do not feed treated forage to meat animals within 90 days of slaughter.
Corn (including sweet)	7	2.5	No restriction on use of corn kernels for human food. Do not feed treated forage to dairy animals or animals being finished for slaughter.
Cotton	N.R.	3.0	Do not graze dairy or meat animals.
Cowpeas	7	2.0	Do not use treated vines for food or feed.
Cranberries	7	6.0	35 days
Cucumbers	7	2.0	5 days
Currants	7	2.5	Apply only before fruit begins to form or after harvest.
Dewberries	N.R.	2.0	Do not apply after the edible parts start to form.
Eggplant	7	2.0	5 days
Endive	7	2.0	Seedling stage only
Filberts	N.R.	8.0	No time limitations
Garlic	N.R.	3.0	No time limitations
Gooseberries	7	4.0	Apply only before fruit begins to form or after harvest.



-4-  
DDT  
1,1,1-trichloro-2,2-bis (p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate;  
5% dust; 10% aerosols

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Grapefruit	7	12.0	30 days
Grapes	7	3.0	40 days (Do not use "stickers" after buckshot stage).
Horseradish	N.R.	2.5	No time limitations
Kale	7	2.5	Do not apply after seedling stage (21 days on greens intended for processing).
Kohlrabi	7	2.5	Do not apply after the edible parts start to form.
Kumquats	7	12.0	30 days
Lemons	7	12.0	30 days
Lettuce	7	2.0	Do not apply after seedling stage for leaf lettuce. 7 days for head lettuce if outer leaves are stripped at harvest. (Not after heads begin to form if outer leaves are not to be stripped).
Lespedeza	N.R.	2.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Limes	7	12.0	30 days
Loganberries	7	2.0	Do not apply after the edible parts start to form.
Mangoes	7	8.0	30 days



1,1,1-trichloro-2,2-bis (p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate;  
5% dust; 10% aerosols

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Melons	7	2.0	5 days
Milo	N.R.	2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not apply after the heads begin to form.
Mint	N.R.	3.0	Use restricted to mint intended for oil production.
Nectarines	7	8.0	30 days
Oats	N.R.	2.5	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not apply after the heads begin to form.
Okra	7	2.5	7 days
Onions	7	3.0	Do not apply to green onions.
Oranges	7	12.0	30 days
Papayas	7	8.0	30 days
Parsnips	7	2.5	Do not use treated tops for food or feed.
Pasture grass	N.R.	2.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Peaches	7	8.0	30 days
Peanuts	7	1.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.



1,1,1-trichloro-2,2-bis (p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate;  
5% dust; 10% aerosols

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Pears	7	8.0	For 5 applications - 30 days
Peas	7	2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not apply to peas which are to be shipped interstate in the pods after the pods start to form.
Pecans	N.R.	8.0	No time limitations
Peppers	7	2.0	5 days
Pineapples	7	2.0	Do not feed treated pineapple skins or shells to dairy animals or animals being finished for slaughter
		25.0	Pre-planting soil treatment only
Potatoes	N.R.	2.5	No time limitations
Plums	7	8.0	30 days
Prunes	7	8.0	30 days
Quinces	7	8.0	For 5 applications - 30 days
Radishes	7	2.5	No time limitations
Raspberries	7	2.0	Do not apply after the edible parts start to form.
Rice	N.R.	2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not apply after the heads begin to form.





1,1,1-trichloro-2,2-bis (p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate;  
5% dust; 10% aerosols

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Rutabagas	7	2.5	No time limitations
Rye	N.R.	2.0	Do not feed treated forage to diary animals or animals being finished for slaughter. Do not apply after the heads begin to form.
Sorghum	N.R.	2.0	Do not feed treated forage to diary animals or animals being finished for slaughter. Do not apply after the heads begin to form.
Soybeans	7	2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Spinach	7	2.5	Do not apply after seedling stage (21 days on greens intended for processing).
Squash	7	2.0	5 days
Strawberries	7	2.5	Apply only before fruit begins to form or after harvest.
Summer squash	7	2.0	5 days
Sweet potatoes	N.R.	2.5	No time limitations
Swiss chard	7	2.5	Do not apply after seedling stage (21 days on greens intended for processing).
Tangelos	7	8.0	30 days
Tangerines	7	8.0	30 days



1,1,1-trichloro-2,2-bis (p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate;  
5% dust; 10% aerosols

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Tomatoes	7	2.0	5 days
Turnips	7	2.5	Do not apply after seedling stage if tops are to be used for food or feed.
Vetch and other forage legumes (including soybeans and cowpeas)	N.R.	2.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Walnuts	N.R.	8.0	No time limitations
Wheat	N.R.	2.0	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not apply after the heads begin to form.
Mushroom houses	7	200 mg. per sq. ft.	Apply to the walls of the mushroom house only between crops, when mushrooms are not present.
Alfalfa	N.R.*	15*	Pre-planting soil application only*
Clover			
Corn			
Cowpeas			
Lespedeza			
Soybeans			
Sorghum			

\* Applies to all uses in this group.



DEMETON<sup>1/</sup>  
O,O-diethyl-(2-ethylmercaptoethyl) thiophosphate  
 (a mixture of the thiono- and thiol- isomers)

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon  
 of the mixed thiophosphates

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	oz./A.	
Alfalfa	N.R.	8	Seed crops only. Do not use treated seed for food or feed and do not feed treated forage.
Almonds	0.75 in nuts 5.0 in hulls	12	21 days
Apples	0.75	30	21 days. No more than 3 applications per season.
Broccoli	0.75	8	21 days
Brussels sprouts	0.75	8	21 days
Cabbage	0.75	8	21 days
Cauliflower	0.75	8	21 days
Cotton	N.R.	6	Do not apply within 5 days of hand picking.
Grapefruit	0.75	40	21 days
Grapes	1.25	6	21 days
Hops	N.R.	8	21 days
Lemons	0.75	40	21 days
Lettuce	0.75	8	21 days
Muskmelons	0.75	6	21 days
Oranges	0.75	40	21 days

<sup>1/</sup> Common name for the active ingredient in the proprietary product being marketed under the trade name "Systox."



DEMETON<sup>1/</sup>

O,O-diethyl-(2-ethylmercaptoethyl) thiophosphate  
(a mixture of the thiono- and thiol- isomers)

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon  
of the mixed thiophosphates

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	oz./A.	
Pears	N.R.	8	Pre-planting treatment only
Pecans	0.75	12	21 days
Pineapples	N.R.	8	Pre-planting treatment only
Potatoes	0.75	3	21 days
Strawberries	0.75	6	21 days
Walnuts	0.75	12	21 days

<sup>1/</sup> Common name for the active ingredient in the proprietary product being  
marketed under the trade name "Systox."





## DIAZINON

O,O-diethyl-C-2-isopropyl-4-methyl-pyrimidyl (6)7 thiophosphate

PRINCIPAL FORMULATIONS: 25% wettable powder; 25% emulsifiable concentrate;  
4% dust

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Cherries	N.R.	5.0	Post-harvest use only
Pears	N.R.	7.5	Post-harvest use only
Potatoes	N.R.	2.0	14 days
Strawberries	N.R.	3.0	Post-harvest use only



DICHLONE<sup>1/</sup>  
(2,3-dichloro-1,4-naphthoquinone)

PRINCIPAL FORMULATIONS: 1.0%, 1.5%, 2.0%, 3.0% and 4.0% dusts; 50% wettable powder; 55% paste (for seed treatment)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		1b./A.	
Apples	N.R.	2.5	First cover, 120-160 days of harvest.
Cabbage	N.R.	0.4 (combined with 30% sulfur)	Four weeks after transplanting.
Celery	3	0.75	7-10 day schedule, no time limitations.
Cherries	N.R.	1.25	Petal fall, 40-55 days of harvest.
Mint	N.R.	1.0	4 to 6 applications at 1 lb./100 gals. at 10-14 day intervals in Western Oregon.
Peaches	N.R.	1.25	Petal fall, 60-125 days of harvest.
Pears	N.R.	2.5	First cover, 120-130 days of harvest.
Plums	N.R.	1.25	Petal fall, 90-120 days of harvest.
Potato seed pieces	N.R.	1 lb. of 50% wettable powder in 10 gal. water	Use as a dip for seed pieces.

<sup>1/</sup> Proprietary name: "Phygon"



1/  
DICHLONE

(2,3-dichloro-1,4-naphthoquinone)

PRINCIPAL FORMULATIONS: 1.0%, 1.5%, 2.0%, 3.0% and 4.0% dusts; 50% wettable powder; 55% paste (for seed treatment)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Alfalfa	N.R.*	lbs./A	Seed treatment only. Do not use treated seed for food or feed.*
Beets			
Corn		4 ozs. per 100	
Peas		lbs. seed using	
Peppers		either the 50%	
Rice		wettable pow-	
Sorghum		der or the 55%	
Spinach		paste*	
Swiss chard			
Tomatoes			
Sweetpotatoes	N.R.	2 lbs. 50%/ 100 gals. water	Dip roots before storage.
Tomatoes	3	1.25	7-10 day schedule, no time limitations. Also commonly used in plant beds.

1/ Proprietary name: "Phygon"

\* Applies to all uses in this group



DICHLORAL UREA  
1,3-bis(2,2,2-trichloro-1-hydroxy ethyl) urea

PRINCIPAL FORMULATIONS: 73.0% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Sugar beets	N.R.	lbs./A. 7.3	Pre-emergence use only, 160-215 days before harvest





DIELDRIN  
1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-  
1,4-endo, exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 1.5 lbs. per gallon; 50% wettable powder; 1.5% dust; 5%, 10%, and 15% granular products; 50% and 75% wettable powders for seed treatments; fertilizer containing up to 24 lbs. of dieldrin per ton

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		F = Foliage S = Soil	
	p.p.m.	lbs./A.	
Apples	0.25	2.0 F	35 days
Apricots	0.1	1.25 F	45 days
Cherries	0.25	1.25 F	30 days
Citrus (including grapefruit, lemons, limes, oranges, tangerines)	0.25	0.5 F	30 days
		2.25	Apply only to ground and trunk; avoid contamination of fruit.
		5.0 S	Apply only to ground around trees for control of Mediterranean fruit fly.
Cranberries	0.1	1.25 F	21 days
		5.0 S	Preplanting application only
Grapes	0.1	0.125 F	30 days
Mangoes	0.1	0.75 F	45 days
		4.0 S	Preplanting application only
Nectarines	0.1	1.25 F	45 days
Peaches	0.1	1.25 F	45 days
		2.50 F	Do not apply after shuck split.
Pears	0.25	2.0 F	35 days



DIELDRIN

1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-  
1,4-endo, exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 1.5 lbs. per gallon; 50% wettable powder; 1.5% dust; 5%, 10%, and 15% granular products; 50% and 75% wettable powders for seed treatments; fertilizer containing up to 24 lbs. of dieldrin per ton

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		F = Foliage S = Soil	
	p.p.m.	lbs./A.	
Pineapples	0.25	1.0 F	60 days
		4.0 S	Preplanting application only
Plums	0.1	1.25 F	Do not apply after first cover (3 weeks after petal fall).
Prunes	0.1	1.25 F	Do not apply after first cover (3 weeks after petal fall).
Quinces	0.25	0.75 F	35 days
		1.0 S	35 days
Strawberries	0.1	5.0 S	Preplanting application only
Asparagus	0.1	3.0 S	Preplanting application only
Beans (including blackeyed peas and soybeans)	0	3.0 S	Preplanting application only
Beets (garden)	0.25	0.5 F	30 days
		3.0 S	Preplanting application only
Broccoli	0.25	0.5 F	30 days
		3.0 S	Preplanting application only



DIELDRIN

1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-  
1,4-endo, exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 1.5 lbs. per gallon; 50% wettable powder; 1.5% dust; 5%, 10%, and 15% granular products; 50% and 75% wettable powders for seed treatments; fertilizer containing up to 24 lbs. of dieldrin per ton

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		F = Foliage S = Soil	
	p.p.m.	lbs./A.	
Brussels sprouts	0.25	0.5 F	30 days
		3.0 S	Preplanting application only
Cabbage	0.25	0.5 F	30 days
		3.0 S	Preplanting application only
Carrots	0.1	0.5 F	21 days
Cauliflower	0.25	0.5 F	30 days
		3.0 S	Preplanting application only
Celery	0.25	3.0 S	Preplanting application only
Collards	0.25	0.5 F	21 days
		1.0 S	Preplanting application only
Cucumbers	0.25	0.5 F	14 days
		3.0 S	Preplanting application only
Eggplant	0.1	0.5 F	7 days
		3.0 S	Preplanting application only
Endive (Escarole)	0.25	0.5 F	30 days
		3.0 S	Preplanting application only
Horse-radish	0.1	0.5 F	21 days



DIELDRIN

1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-  
1,4-endo, exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 1.5 lbs. per gallon; 50% wettable powder; 1.5% dust; 5%, 10%, and 15% granular products; 50% and 75% wettable powders for seed treatments; fertilizer containing up to 24 lbs. of dieldrin per ton

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		F = Foliage S = Soil	
	p.p.m.	lbs./A.	
Kale	0.25	0.5 F	21 days
		1.0 S	Preplanting application only
Kohlrabi	0.25	0.5 F	30 days
		3.0 S	Preplanting application only
Lettuce	0.25	0.5 F	30 days
		3.0 S	Preplanting application only
Melons (including cantaloupes, muskmelons, pumpkins, watermelons, winter squash)	0	0.5 F	Do not apply after blossoming.
		3.0 S	Preplanting application only
Mustard greens	0.25	0.5 F	21 days
		1.0 S	Preplanting application only
Onions	0.1	0.5 F	Do not use on green or spring onions. 14 days on dry onions
		2.0 S	Preplanting application only
Peppers	0.1	0.5 F	7 days
		3.0	Preplanting application only





DIELDRIN

1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-  
1,4-endo, exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 1.5 lbs. per gallon; 50% wettable powder; 1.5% dust; 5%, 10%, and 15% granular products; 50% and 75% wettable powders for seed treatments; fertilizer containing up to 24 lbs. of dieldrin per ton

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		F = Foliage S = Soil	
	p.p.m.	lbs./A.	
Parsnips	0.1	0.25 F	21 days
Salsify	0.1	0.5 F	21 days
Pimentos	0.1	0.5 F	7 days
		3.0 F	Preplanting application only
Potatoes	0.1	0.5 F	21 days
		3.0 S	Preplanting application only
Radishes	0.1	0.5 F	21 days
Rutabagas	0.25	0.5 F	30 days
		3.0 S	Preplanting application only
Spinach	0.25	0.5 F	21 days
		1.0 S	Preplanting application only
Summer squash	0.25	0.5 F	14 days
		3.0 S	Preplanting application only
Sweetpotatoes	0.1	1.0 F	21 days
		3.0 S	Preplanting application only
Tomatoes	0.1	0.5 F	7 days
		3.0 S	Preplanting application only



DIELDRIN

1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-  
1,4-endo, exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 1.5 lbs. per gallon; 50% wettable powder; 1.5% dust; 5%, 10%, and 15% granular products; 50% and 75% wettable powders for seed treatments; fertilizer containing up to 24 lbs. of dieldrin per ton

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		F = Foliage S = Soil	
Turnips	p.p.m. 0.25 (roots and tops)	lbs./A. 0.5 F 3.0 S	30 days Preplanting application only
Cotton	N.R.	0.5 F	5 days of handpicking. DO NOT FEED TREATED COTTON TRASH TO DAIRY ANIMALS OR ANIMALS BEING FINISHED FOR SLAUGHTER.
Rice	0.1 (on grain) 0.75 (on straw)	0.25 F 3.0	30 days Preplanting application only
Small grains (Barley, oats, rye, wheat)	0.1 (on grain) 0.75 (on straw)	0.5 F 3.0 S	30 days of harvest or grazing Preplanting application only



DIELDRIN

1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-  
1,4-endo, exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 1.5 lbs. per gallon; 50% wettable powder; 1.5% dust; 5%, 10%, and 15% granular products; 50% and 75% wettable powders for seed treatments; fertilizer containing up to 24 lbs. of dieldrin per ton

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		F = Foliage S = Soil	
	p.p.m.	lbs./A.	
Corn	0 (on grain and forage)	3.0 S	Preplanting application only
Hops	0	5.0 S	Early season use only, before growth starts
Legumes (including alfalfa, clovers, cowpeas lespedeza, peas, soybeans)	0	3.0 S	Preplanting application only
Mint	0	5.0 S	Preplanting application only; may be used in fall or spring just before disking or harrowing old plantings.
Peas, cowpeas	0	3.0 S	Preplanting application only
Sugar beets	0	1/2 lb./100 lbs. seed	Seed treatment only. Do not use treated seed for food or feed.
Sugar cane	0	3.0 S	Preplanting application only
Cane sorghum	0	3.0 S	Preplanting application only



DIELDRIN

1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-  
1,4-endo, exo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 1.5 lbs. per gallon; 50% wettable powder; 1.5% dust; 5%, 10%, and 15% granular products; 50% and 75% wettable powders for seed treatments; fertilizer containing up to 24 lbs. of dieldrin per ton

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		F = Foliage S = Soil	
	p.p.m.	lbs./A.	
Alfalfa, clover and other for- age legumes	0	0.5 F	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not use on forage to be sold commercially or to be shipped interstate.
Grass	0	0.5 F	Do not use on crops to be fed to dairy animals or animals being finished for slaughter.
Sheep	0	0.001 lbs. per head	Do not re-apply; do not slaughter any animals for at least 90 days after treatment.





DILAN  
2-nitro-1,1-bis(p-chlorophenyl) butane and propane mixture

PRINCIPAL FORMULATIONS: 1.5% dusts; 25% wettable powder; 25% emulsifiable concentrate

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Beans	N.R.	lbs./A.  1	Do not apply after the first blooms appear.



DINITRO-O-CYCLOHEXYL PHENOL

PRINCIPAL FORMULATIONS: 2% dust; 20% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Citrus fruits	p.p.m. 1	lbs./A. 4	14 days



DIURON  
3-(3,4-dichlorophenyl)-1,1-dimethylurea

PRINCIPAL FORMULATIONS: 80.0% wettable powder  
28.0% liquid suspension

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Alfalfa	p.p.m. 2	lbs./A. 2.4	Fall or winter. Apply between October 15 and December 15 in Eastern Washington and Oregon; through January in Nevada and California. Apply to established stand (1 yr. or older). Do not rotate crop within 1 yr. of treatment.
Caneberries Blackberries Raspberries Related berries	N.R.	2.4	Fruit not present. Washington-Oregon only. First application-October-November, second application April-May or single application in January-February. Direct spray on soil at base of plants. Apply only to established caneberry fields (1 yr. or older).
Cottonseed	1	1.5	Pre-emergence
		1.2	At lay-by (irrigated areas only)
Grass crops Grass hay raised for seed.	2	3.2	Fall or early winter (Oregon).
Peppermint	N.R.	2.4	After last cultivation in spring prior to emergence of mint (Washington-Oregon).
		70.0	Spot treatment, follow by irrigation
Pineapples	1	4.8	Just after planting (18 months)
Potatoes	1	0.8	Pre-emergence



DIURON

3-(3,4-dichlorophenyl)-1,1-dimethylurea

PRINCIPAL FORMULATIONS: 80.0% wettable powder  
28.0% liquid suspension

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Sugarcane	p.p.m. 1	lbs./A. 4.8	Just after planting
Irrigation ditches	N.R.	80.0	Apply only during non-crop season.





DN-111  
(Dicyclohexylamine salt of dinitro-o-cyclohexylphenol)

PRINCIPAL FORMULATIONS: 20% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	1	2.5	15 days
Apricots	1	2.5	15 days
Cherries	1	2.5	15 days
Citrus fruits	1	2.5	15 days
Nectarines	1	2.5	15 days
Peaches	1	2.5	30 days
Pears	1	2.5	15 days
Plums	1	2.5	15 days
Prunes	1	2.5	15 days
Quinces	1	2.5	15 days



DNAP  
2,4-dinitro-6-sec-amylphenol

PRINCIPAL FORMULATIONS: 75% emulsifiable concentrate

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Alfalfa and clover	N.R.*	lbs./A.  2.3	Apply immediately after first cutting, before new growth starts.
Asparagus		1.5	Dormant application in early winter after the seed crop has been harvested (5-6 months before harvest)
Orchards and vineyards		2.3	Apply in early spring for winter annual weed control.
Strawberries		1.5	Dormant application only to the middles and shoulders of beds

\* Applies to all uses.



DNAP - DNBP (MIXTURE)  
2,4-dinitro-6-sec-amyl - and butylphenol

PRINCIPAL FORMULATIONS: Liquid product containing 10% DNAP and 50% DNBP

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Alfalfa	N.R.*	2.25	Dormant application or immediately after first cutting, before new growth starts
Asparagus		1.5	Dormant application only
Caneberries		2.25	Dormant application only
Clover (ladino and trefoil)		3.0	Apply immediately after first cutting, before new growth starts.
Cotton		1.5	Pre-planting application only
Orchards and vineyards		2.25	Pre-emergence weed control treatment only
Peas		1.5	Pre-planting application only
Potatoes		1.5	Pre-planting application only
Strawberries		2.25	Dormant application only

\* Applies to all uses.



DNBP  
2,4-dinitro-6-sec-butylphenol

PRINCIPAL FORMULATIONS: 55% emulsifiable concentrate containing 5 lbs. of  
DNBP per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Beans	N.R.*	0.93	Pre-emergence application only
Cane fruits		2.8	Post-harvest application in fall or before growth starts in spring
Corn		0.93	Pre-emergence application only
Cucurbits		0.93	Pre-emergence application only
Grapes		2.8	Post-harvest application in fall or before growth starts in spring
Potatoes		0.93	Pre-emergence application only

\* Applies to all uses.





DNBP (ALKANOL AMINE SALTS)  
2,4-dinitro-6-sec-butylphenol, alkanol amine salts

PRINCIPAL FORMULATIONS: 36% triethanolamine salt (liquid); 53% and 57% ethanol and isopropanolamine salts (liquids)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Alfalfa			
seedling		1.5	Apply when two or more leaves are showing. Do not pasture animals in treated fields.
established		3	Dormant application during fall or winter only
Almonds		5	Dormant application only
Beans (field, lima, snap)		9	Pre-emergence application only
Clover seedlings (birdsfoot trefoil, red, sweet)	N.R.*	1.5	Apply when two or more leaves are showing. Do not pasture animals in treated fields.
Corn (field, sweet, pop)		9	Pre-emergence application only
Cotton		11.25	Pre-emergence application only
Grapes		1.25	Dormant application only
Mint		9	Pre-emergence application only
Pears		2.5	Pre-emergence application only
Peanuts		10.5	Pre-emergence application only

\* Applies to all uses.



DNBP (ALKANOL AMINE SALTS)  
2,4-dinitro-6-sec-butylphenol, alkanol amine salts

PRINCIPAL FORMULATIONS: 36% triethanolamine salt (liquid); 53% and 57% ethanol and isopropanolamine salts (liquids)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Peas	N.R.*	9	Pre-emergence application only
Potatoes		6	Pre-emergence application only
Soybeans		11.25	Pre-emergence application only
Strawberries		4.5	Dormant application only

\* Applies to all uses.



DNBP (AMMONIUM SALT)  
2,4-dinitro-6-sec-butylphenol, ammonium salt

PRINCIPAL FORMULATIONS: 13.7% water soluble

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Alfalfa		lbs./A.	
seedlings	N.R.	0.75	Apply when seedlings have two or more true leaves. Do not graze animals on treated fields.
established	N.R.	1.25	Dormant application only
Clover seedlings (red and sweet)	N.R.	0.75	Apply when seedlings have two or more true leaves. Do not graze animals on treated fields.
Peas	N.R.	0.75	Apply when peas are 4-8 inches tall. Do not feed treated pea hay to livestock.



DNOC  
4,6-dinitro-o-cresol

PRINCIPAL FORMULATIONS: 19% sodium salt (liquid); 30% sodium salt (liquid);  
40.3% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Apples	N.R.*	4.5	Dormant application only
Apricots		3.8	Dormant or delayed dormant application only
Asparagus		1.0	Application only before growth starts
Caneberries		1.25	Application only at green tip stage
Cherries		4.5	Dormant application only
Peaches		1.25	Dormant application only
Pears		3.8	Dormant application only
Plums		3.8	Dormant or delayed dormant application only
Prunes		3.8	Dormant or delayed dormant application only
Walnuts		5.4	Dormant application only
Mushroom houses	N.R.	1 gal. of the 19% sodium salt/100 gals. water	Spray interior of mushroom houses between crops, when mushrooms are not present.

\* Applies to all uses in this group.





# DORMANT OILS<sup>1/</sup>

PRINCIPAL FORMULATIONS: Usually marketed as emulsifiable concentrates containing a high percentage of oil

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Deciduous fruits	Exempt	lbs./A. 100	Dormant and delayed dormant only
Bush fruits Blackberries Currants Gooseberries Grapes Raspberries	Exempt	30	Dormant only
Pecans	Exempt	50	Dormant only

<sup>1/</sup> Phytotoxic to foliage

Office of the

Minister of the Interior

Washington, D.C.

April 10, 1900

Very respectfully,  
J. Edgar Hoover

ENDRIN  
1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-  
1,4-endo,endo-5,8-dimethanonaphthalene

PRINCIPAL FORMULATIONS: 1.5% dust; emulsifiable concentrate containing  
1.6 lbs. per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Broccoli	N.R.	0.40	Do not apply after the edible parts start to form.
Cabbage	0	0.40	Do not apply after the edible parts start to form.
Cauliflower	N.R.	0.30	Do not apply after the edible parts start to form.
Cottonseed	0	0.40	Workers entering fields within 5 days after application should be protected.
Cucumbers	0	0.25	14 days
Eggplant	0	0.25	14 days
Peppers	0	0.25	14 days
Potatoes	0	0.25	21 days
Small grains	N.R.	0.20	Do not apply after the heads start to form. Do not pasture animals in treated fields.
Summer squash	0	0.25	14 days
Sugar beets	0	0.40	60 days
Tomatoes	0	0.40	14 days



EPN  
O-ethyl O-p-nitrophenyl phenylphosphonothioate

PRINCIPAL FORMULATIONS: 25% wettable powder  
 1%, 2%, and 3% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Almonds	0.5	2.0	21 days
Apples	3	3.0	21 days
Apricots	3	3.0	21 days
Beans	3	1.0	21 days
Cherries	3	3.0	21 days
Citrus fruits	3	3.0	30 days
Corn	3	0.75	14 days
Cottonseed	0.5	1.0	21 days
Grapes	3	0.75	21 days
Nectarines	3	3.0	21 days
Olives	3	4.0	Make no application after July 15.
Onions <sup>1/</sup>	N.R.	0.75	
Peaches	3	3.0	21 days
Pears	3	3.0	21 days
Pecans	0.5	2.0	21 days
Plums	3	3.0	21 days
Sugar beets	3 <sup>2/</sup>	1.0	21 days
Tomatoes	3	1.0	21 days
Walnuts	0.5	2.0	21 days

<sup>1/</sup> Do not use on green onions.

<sup>2/</sup> But not sugar beet tops.



N-Ethylmercuri-1,2,3,6-tetrahydro-3,6-endo-  
methano-3,4,5,6,7,7-hexachlorophthalimide  
"Emmi" 1/

PRINCIPAL FORMULATIONS: 10.34% emulsifiable concentrate;  
10.00% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		oz./bu.	
Barley		0.5	
Flax		1.5	
Oats	N.R.*	0.5	Seed treatment only. Do not use treated seed for food or feed.*
Rye		0.5	
Wheat		0.5	

1/ "Emmi" is a registered trademark of the Velsicol Corporation.

\* Applies to all uses.





## ETHYL MERCURY CHLORIDE

PRINCIPAL FORMULATIONS: 2% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		oz./100 lbs. seed	
Cotton	N.R.	9	Seed treatment only
Peanuts	N.R.	3	Seed treatment only
Peas	N.R.	3 1/3	Seed treatment only



ETHYL MERCURY 2,3-DIHYDROXYPROPYLMERCAPTIDE (6%)  
PLUS ETHYL MERCURY ACETATE (1.3%)

PRINCIPAL FORMULATIONS: Mixture of technical materials with inert diluents

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Barley	Restrictive labeling*	oz./bu. 1/4	Seed treatment only. Do not use treated seed for food or feed.*
Flax		3/4	
Millet		1/3	
Oats		1/4	
Rice		1/4	
Rye		1/4	
Sorghum		1/3	
Wheat		1/4	
Cottonseed	Restrictive labeling	2.5 oz./100 lbs.	Seed treatment only. Do not use treated seed for food or feed.

\*Applies to all uses in this group.



## ETHYL MERCURY PHOSPHATE

PRINCIPAL FORMULATIONS: 5% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Barley	N.R.*	oz./bu.	Seed treatment only. Do not use treated seed for food or feed.*
Flax		0.5	
Grain		1.5	
Millet		0.5	
Oats		0.5	
Peas		0.5	
Rye		1.0	
Sorghum		0.5	
Sugar beets		3.0	
Wheat		0.5	
Cotton	N.R.	4.5 oz./100 lbs.	Seed treatment only. Do not use treated seed for food or feed.

\*Applies to all uses.



ETHYL MERCURY P-TOLUENESULFONANILIDE<sup>1/</sup>

PRINCIPAL FORMULATIONS: 2.3%, 7.7%, and 15.4% wettable powders

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		oz./bu.	
Barley	N.R.*	0.5	Seed treatment only. Do not use treated seed for food or feed.*
Oats		0.5	
Peas		1.0	
Sorghum		0.5	
Wheat		0.5	
Cotton	N.R.	4.5 oz./ 100 lbs.	Seed treatment only. Do not use treated seed for food or feed.
Wheat	N.R.	0.4 lb./A.	Apply to winter wheat in late fall.

<sup>1/</sup> Active ingredient in the proprietary product "Ceresan M"

\*Applies to all uses in this group.





ETHYLENE DIBROMIDE<sup>1/</sup>

PRINCIPAL FORMULATIONS: About 5% in grain fumigants in combination with other fumigant ingredients, such as carbon tetrachloride and ethylene dichloride. 10-25% in spot fumigants for mills and elevators, usually in combination with other fumigants, such as ethylene dichloride and carbon tetrachloride. Soil fumigants usually containing about 40% or 80% of EDB in a distillate base.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m. (as inorganic Br.) <u>2/</u>		
Asparagus	10	10 gals./A.	Preplanting soil treatment - 3 weeks aeration
Asparagus	10	600 lbs./A.	Apply in the fall and delay planting until the following spring. Do not harvest asparagus crop until the following season.
Barley	50	0.4 gals./ 1000 bu.	Fumigation use - no time limitations
Beans, lima	5	10 gals./A.	Preplanting soil treatment - 3 weeks aeration
Carrots (with or without tops)	75	10 gals./A.	Preplanting soil treatment - 3 weeks aeration
Cauliflower	10	10 gals./A.	Preplanting soil treatment - 3 weeks aeration
Corn	50	0.4 gals./ 1000 bu.	Fumigation use - no time limitations
Cotton seed	25	10 gals./A.	Preplanting soil treatment - 3 weeks aeration
Oats	50	0.4 gals./ 1000 bu.	Fumigation use - no time limitations
Parsnips	75	10 gals./A.	Preplanting soil treatment - 3 weeks aeration
Popcorn	50	0.4 gals./ 1000 bu.	Fumigation use - no time limitations

1/ Quarantine Program commodity fumigant

2/ Exemption for organic bromide



ETHYLENE DIBROMIDE<sup>1/</sup>

PRINCIPAL FORMULATIONS: About 5% in grain fumigants in combination with other fumigant ingredients, such as carbon tetrachloride and ethylene dichloride. 10-25% in spot fumigants for mills and elevators, usually in combination with other fumigants, such as ethylene dichloride and carbon tetrachloride. Soil fumigants usually containing about 40% or 80% of EDB in a distillate base.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m. (as inorganic Br. <sup>2/</sup>		
Rice	50	0.4 gals./ 1000 bu.	Fumigation use - no time limitations
Rye	50	0.4 gals./ 1000 bu.	Fumigation use - no time limitations
Sorghum	50	0.4 gals./ 1000 bu.	Fumigation use - no time limitations
Strawberries	5	10 gals./A	Preplanting soil treatment - 3 weeks aeration.
Sweetpotatoes	50	10 gals./A	Preplanting soil treatment - 3 weeks aeration.
Wheat	50	0.4 gals./ 1000 bu.	Fumigation use - no time limitations

<sup>1/</sup> Quarantine Program commodity fumigant

<sup>2/</sup> Exemption for organic bromide



ETHYLENE DIBROMIDE <sup>1/</sup>

PRINCIPAL FORMULATIONS: About 5% in grain fumigants in combination with other fumigant ingredients, such as carbon tetrachloride and ethylene dichloride. 10-25% in spot fumigants for mills and elevators, usually in combination with other fumigants, such as ethylene dichloride and carbon tetrachloride. Soil fumigants usually containing about 40% or 80% of EDB in a distillate base.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Beans, string	p.p.m. (as inorganic Br. <u>2/</u>		
Bitter melons			
Cantaloupes			
Cavandish bananas			
Citrus fruit			
Cucumbers			
Fitchi nuts	10*	1.5 lbs./ 1000 cu.ft.*	Fumigation use - USDA Quarantine Program*
Guavas			
Mangoes			
Papayas			
Peppers (bell)			
Pineapples			
Zucchini squash			

1/ Quarantine Program commodity fumigant

2/ Exemption for organic bromide

\* Applies to all uses



ETHYLENE DICHLORIDE<sup>1/</sup>

PRINCIPAL FORMULATIONS: Various formulations with other fumigating ingredients

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Apples	N.R.	4 oz./tree	Apply only to trunk and lower branches (post harvest)
Apricots	N.R.	4 oz./tree	Apply only to trunk and lower branches (post harvest)
Barley	Exempt	7.5 gals./ 1000 bu.	No time limitations
Corn	Exempt	7.5 gals./ 1000 bu.	No time limitations
Oats	Exempt	7.5 gals./ 1000 bu.	No time limitations
Peaches	N.R.	4 oz./tree	Apply only to trunk and lower branches (post harvest)
Pears	N.R.	4 oz./tree	Apply only to trunk and lower branches (post harvest)
Plums	N.R.	4 oz./tree	Apply only to trunk and lower branches (post harvest)
Rice	Exempt	7.5 gals./ 1000 bu.	No time limitations
Rye	Exempt	7.5 gals./ 1000 bu.	No time limitations
Sorghum (milo)	Exempt	7.5 gals./ 1000 bu.	No time limitations
Wheat	Exempt	7.5 gals./ 1000 bu.	No time limitations

<sup>1/</sup> Grain and commodity fumigant





FERBAM  
(Ferric dimethyldithiocarbamate)

PRINCIPAL FORMULATIONS: 76% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Almonds	0.1	7.6	Petal fall (100-120 days)
Apples	7	11.1	7 days of harvest
Apricots	7	7.6	Pre-bloom to just after bloom (100-115 days)
Beans, snap	7	3	4 days of picking
Blackberries	7	2.3	Just before bloom (45-60 days)
Blueberries	7	4.6	21 days after full bloom (35-50 days)
Boysenberries	7	3	Just before bloom (30-45 days)
Cabbage	7	2.3	Plant bed treatment (60 days)
Carrots	7	3	7 days if tops are to be used for food or feed
Celery	7	3	Remove residues by stripping, trimming and washing.
Cherries	7	5.7 3.8	Cover spray 7-10 days
Cranberries	7	3	28 days after midbloom (30-60 days)
Currants	7	3	14 days after bloom (45 days)
Dates	7	Combined with sulfur	Fruit fully grown through maturity
Dewberries	7	3	Just before bloom (35-50 days)



FERBAM  
(Ferric dimethyldithiocarbamate)

PRINCIPAL FORMULATIONS: 76% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Gooseberries	7	3	21 days after bloom (40 days)
Grapes	7	3	14 days after berries touch (40 days)
Lettuce	7	1.5	Plant bed treatment (30-45 days)
Nectarines	7	5.7	Immediately after bloom (90-150 days)
Peaches	7	7.6	Shuck shed (60-120 days)
Pears	7	5.7	Last cover (7 days)
Peppers	7	1.3	Plant bed treatment (60-80 days)
Plums	7	5.7	35 days
Potatoes	N.R.	3	None
Prunes	7	5.7	35 days
Quinces	7	5.7	7 days
Raspberries	7	3	Just before bloom (60 days)
Strawberries	7	3	Full bloom (20-30 days)
Tomatoes	7	4	14 days



GENITE 923  
(2,3-dichlorophenyl benzene sulfonate)

PRINCIPAL FORMULATIONS: 50% emulsifiable concentrate

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Almonds	N.R.	1-1/2 pts./100 gals. or 1 gal./A.	Pink and prepink sprays, or before edible parts start to form.
Apples	N.R.	1-1/2 pts./100 gals. or 1 gal./A.	Pink and prepink sprays, or before edible parts start to form.
Cherries	N.R.	1-1/2 pts./100 gals.	Pink spray only
Peaches	N.R.	1-1/2 pts./100 gals. or 1 gal./A.	Pink and prepink sprays, or before edible parts start to form.
Pears	N.R.	1-1/2 pts./100 gals. or 1 gal./A.	Pink and prepink sprays, or before edible parts start to form.
Plums	N.R.	1-1/2 pts./100 gals. or 1 gal./A.	Pink and prepink sprays, or before edible parts start to form.
Prunes	N.R.	1-1/2 pts./100 gals. or 1 gal./A.	Pink and prepink sprays, or before edible parts start to form.



GLYODIN

2-heptadecyl-2-imidazoline acetate

PRINCIPAL FORMULATIONS: 34% solution weighing 7 lbs. per gallon <sup>1/</sup>

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	5	3	Up to petal fall
	5	1.8	Cover sprays - up to harvest
Cherries	5	3	7-14 days before harvest
Peaches	5	3	Cover sprays - up to harvest

<sup>1/</sup> The proprietary product available as "Crag Fruit Fungicide 341"





HEPTACHLOR

3a,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene

PRINCIPAL FORMULATIONS: 25% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 1.5% to 2.5% dusts; granular formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Alfalfa	p.p.m. 0.1	1 oz./A.	3 days before harvest or pasturing
		4 oz./A.	7 days before harvest or pasturing
		8 oz./A.	10 days before harvest or pasturing
		2 lbs./A.	15 days before harvest or pasturing
Clover	0.1	1 oz./A.	3 days before harvest or pasturing
		4 oz./A.	7 days before harvest or pasturing
		8 oz./A.	10 days before harvest or pasturing
		2 lbs./A.	15 days before harvest or pasturing
Sweet clover	0.1	1 oz./A.	3 days before harvest or pasturing
		4 oz./A.	7 days before harvest or pasturing
		8 oz./A.	10 days before harvest or pasturing
		2 lbs./A.	15 days before harvest or pasturing
Beans, lima	N.R.	1 lbs./A	
		3	Soil treatment only. Do not apply after the edible parts start to form.
Beets, garden	0.1	3	Preplanting soil treatment



HEPTACHLOR

3,4,5,6,7,8,8-heptachloro-3,4,7,7a-tetrahydro-4,7-methanoindene

PRINCIPAL FORMULATIONS: 25% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 1.5% to 2.5% dusts; granular formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Blackberries	N.R.	5	Soil application. No application while edible parts are present.
Blueberries	N.R.	5	Soil application. No application while edible parts are present.
Boysenberries	N.R.	5	Soil application. No application while edible parts are present.
Cabbage	0.1	1	Around plants after planting and 10 days later
Cabbage	0.1	3	Do not apply after the edible parts start to form.
Citrus	N.R.	5	Granules (under tree for Medfly control)
Corn	0.1	3	Soil treatment only
Cotton	0.1	1	Do not apply within 5 days of picking. DO NOT FEED TREATED COTTON TRASH TO DAIRY ANIMALS OR ANIMALS BEING FINISHED FOR SLAUGHTER.
Cotton	0.1	3	Soil treatment. Do not apply after the edible parts start to form.
Dewberries	N.R.	5	Soil application. No application while edible parts are present.
Grass, pasture and range	0.1	4 oz./A.	7 days of cutting or pasturing.
Hops	N.R.	5	Soil treatment before growth in spring



HEPTACHLOR

3a,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene

PRINCIPAL FORMULATIONS: 25% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 1.5% to 2.5% dusts; granular formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Onions	0.1	3	Soil treatment. Do not apply after the edible parts start to form.
Onions	0.1	0.625	Foliage application to green onions; 5 days
Peaches	N.R.	1.5	Ground cover application in spring before petal fall
Peanuts	0.1	3	Application up until pegging time only
Pears	N.R.	1.5	Ground cover application in spring before petal fall
Peas	N.R.	3	10 days. Do not apply to varieties with edible pods after blooms appear.
Potatoes	0.1	3	Soil treatment only
Potatoes	0.1	1	Foliage application only
Radishes	0.1	10	Apply to furrow at time of planting and repeat once on young seedlings.
Raspberries	N.R.	5	Soil application. No application while edible parts are present.
Rice	N.R.	2	Do not apply after heads start to form.
Rutabagas	0.1 with- out tops	5	Second application 15-40 days from harvest. Do not use treated tops for food or feed.
Seed treatments	N.R.	5 oz./100 lbs.	No time limitations



HEPTACHLOR  
3a,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene

PRINCIPAL FORMULATIONS: 25% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 1.5% to 2.5% dusts; granular formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Small grains	N.R.	3	Soil treatment only. Do not apply after the edible parts start to form.
Strawberries	N.R.	0.875	Do not apply after opening of first blossom.
Strawberries	N.R.	5	Soil treatment prior to formation of fruit.
Sugar beets	0.1	3	Soil treatment. Do not apply after the edible parts start to form.
Sugar beets	0.1	3	Preplanting soil treatment
Sugar cane	0.1	3	Soil treatment only (at planting time)
Sweetpotatoes	0.1	3	Preplanting soil treatment only
Sweetpotatoes	0.1	3	Foliage treatment - 30 days
Turnips	0.1 with tops	5	Second application 15-40 days from harvest. Do not use treated tops for food or feed.
Mint	N.R.	10	Soil treatment. Do not use leaves for garnishing.





HEPTACHLOR

3a,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene

PRINCIPAL FORMULATIONS: 25% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 1.5% to 2.5% dusts; granular formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Transplant solu- tion for:	p.p.m.	lbs./A.	
Cabbage Cauliflower Sweetpotatoes	0.1*	0.75*	Apply on row at time of transplant- ing.*
Transplant solu- tion for:			
Broccoli Celery Eggplants Lettuce Peppers Tomatoes	N.R.*	0.75*	Apply on row at time of transplant- ing.*
Alfalfa			
Cowpeas			
Clover	N.R.*	3*	Preplanting soil application only*
Lespedeza			
Sorghum			
Soybeans			

\* Applies to all uses in this group.



# HEXACHLOROBENZENE

PRINCIPAL FORMULATIONS: 40% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Sorghum (seed treatment)	Restrictive labeling	oz./bu.  3/4 (dust or slurry)	Do not use treated seed for food or feed.
Wheat (seed treatment)	Restrictive labeling	1 (dust or slurry)	Do not use treated seed for food or feed.



# HYDRATED LIME

PRINCIPAL FORMULATIONS: Technical material

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Fruits and vegetables	Safe chemical	lbs./A.  50 as a dust, 10 to 20 lbs. per 100 gals. as a spray	Sometimes used to whiten foliage to protect it from Japanese beetle attack. Stickers are usually mixed with the lime in order to retain the white coloration for longer periods of time. Calcium sulfate is sometimes used for this purpose. This use of lime is largely ob- solete.  Also used in combination with toxi- cants, particularly arsenicals.



# HYDROCYANIC ACID (Liquid)

PRINCIPAL FORMULATIONS: Technical material

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./1000 cu. ft.	
Almonds			
Barley			
Beans (dried)			
Cashews			
Cocoa beans			
Corn			
Peanuts	25*	2.5*	24-hour aeration period*
Peas (dried)			
Pecans			
Popcorn			
Rice			
Rye			
Walnuts			
Wheat			

\*Applies to all uses.





## HYDROXY-MERCURI-CHLOROPHENOL

PRINCIPAL FORMULATIONS: 28.6% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Potato seed pieces (dip)	N.R.	4 ozs./1.5 gals. water	Wet seed pieces thoroughly
Seedlings (transplant bed)	N.R.	3.3 lbs./A.	After seedlings emerge in plant bed.
Sweet potato seed, stock & sprouts (dip)	N.R.	1 oz./3 gals. water	Dip roots 8 minutes and sprouts for an instant.
Vegetables, forage crops and grass seeds	N.R.	1 oz./15 lbs. seed	Seed treatment only. Do not use treated seed for food or feed.



# HYDROXYMERCURINITROPHENOL-HYDROXYMERCURICHLOROPHENOL

PRINCIPAL FORMULATIONS: Hydroxymercurinitrophenol 12.5%;  
hydroxymercurichlorophenol 3.8%; (Mercury 0.5%)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Irish potatoes	N.R.	1 lb. in 7-1/2 gal. water	Dip whole or cut potato - drain and dry.
Sweetpotatoes	N.R.	1 lb. in 7-1/2 gal. water	Dip potato pieces only.*
		1 lb. in 10 gal. water	Dip lower ends of stem and root of sprout and plant at once.

\*Drain and dry before planting.



IPC  
(Isopropyl N-phenyl carbamate)

PRINCIPAL FORMULATIONS: 50% wettable powder; 2% or 10% dusts;  
21%, 25%, 36.5%, 41%, and 53% emulsifiable concentrates;  
5%, 10%, and 15% pelletized formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Asparagus (Seed crop only)	N.R.	6 6	Pre-emergence for nursery planting Post-emergence (almost at harvest, not a common practice)
Cabbage (Seed crop only)	N.R.	3.1 3.1	Pre-planting or pre-emergence Post-emergence (60 days pre-harvest)
Carrots (Seed crop only)	N.R.	4	Pre-emergence
Celery (Seed crop only)	N.R.	3.1	Pre-emergence
Peas	N.R.	3.9	Pre-planting; work into top 4"-6" soil
Rutabagas (Seed crop only)	N.R.	3.1	Pre-emergence
Spinach	N.R.	5 4	Pre-emergence Post-emergence, not after 2-4 leaf stage
Strawberries	N.R.	6	Dormant treatment only
Sugar beets	N.R.	3.9	Pre-planting
Turnip (seed crops)	N.R.	3.1	Pre-planting



KARATHANE  
(2-capryl-4,6-dinitrophenyl crotonate)

PRINCIPAL FORMULATIONS: 25% wettable powder; 1%, 5%, and 10% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Almonds	N.R.*	1.5	Apply during delayed dormant to jacket stage only.
Apples		1.5	21 days
Cantaloupes		0.5	7 days
Cucumbers		0.5	7 days
Pears		1.5	21 days
Raspberries <sup>1/</sup>		0.63	7 days
Squash		0.5	7 days

<sup>1/</sup> Effectiveness established only for Northwestern and Great Lakes states.

\* Applies to all uses.





1/  
KELTHANE

Diethyl diphenyl trichloroethane

PRINCIPAL FORMULATIONS: 18.5% wettable powder; 18.5% emulsifiable concentrate

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Pears	N.R.	lbs./A. 3	Not to be applied later than 3 weeks after petal fall, except after har- vest.
Almonds			
Apples			
Apricots			
Cherries			
Citrus fruits	N.R.*	3*	Non-bearing trees and nursery stock, and after-harvest use only on bear- ing trees and plants.*
Grapes			
Nectarines			
Peaches			
Plums			
Prunes			
Raspberries			
Strawberries			

1/ Registered trademark of Rohm & Haas Co.

\* Applies to all uses in this group.



# LEAD ARSENATE

PRINCIPAL FORMULATIONS: Basic and acid lead arsenate

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	7	50	30 days, remove excess residues at harvest.
Apricot	7	20	30 days
Asparagus	7	16	Do not apply during the cutting season.
Avocados	7	30	Remove excess residues at harvest.
Blueberries	7	15	Do not apply after edible parts start to form.
Celery	7	5	Do not apply after bunching starts or when celery is half grown.
Cherries	7	20	30 days (fresh market) 14 days (for processing)
Currants	7	6	Do not apply after the edible parts start to form.
Eggplant	7	10	Remove excess residues at harvest.
Gooseberries	7	6	Do not apply after the edible parts start to form.
Grapes	7	15	Do not apply after the edible parts start to form.
Nectarines	7	30	30 days
Peaches	7	30	30 days
Pears	7	50	30 days, remove excess residues at harvest.

RECEIVED FROM THE OFFICE OF THE SECRETARY OF THE ARMY

OFFICE OF THE SECRETARY OF THE ARMY

WASHINGTON, D. C.

1943

NO. 1

1943

1943

1943

1943

1943

1943

1943

1943

1943

-2-  
LEAD ARSENATE

PRINCIPAL FORMULATIONS: Basic and acid lead arsenate

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Peppers	7	10	Remove excess residues at harvest.
Plums	7	30	30 days
Quinces	7	50	30 days, remove excess residues at harvest.
Strawberries	7	8	Do not apply after the edible parts start to form.
Tomatoes	7	10	Remove excess residues at harvest.

THE UNIVERSITY OF CHICAGO

RECEIVED JAN 10 1964

TO THE DIRECTOR OF THE UNIVERSITY OF CHICAGO  
FROM THE DIRECTOR OF THE UNIVERSITY OF CHICAGO  
SUBJECT: [illegible]

1. [illegible]  
2. [illegible]  
3. [illegible]  
4. [illegible]  
5. [illegible]  
6. [illegible]  
7. [illegible]  
8. [illegible]  
9. [illegible]  
10. [illegible]  
11. [illegible]  
12. [illegible]  
13. [illegible]  
14. [illegible]  
15. [illegible]  
16. [illegible]  
17. [illegible]  
18. [illegible]  
19. [illegible]  
20. [illegible]  
21. [illegible]  
22. [illegible]  
23. [illegible]  
24. [illegible]  
25. [illegible]  
26. [illegible]  
27. [illegible]  
28. [illegible]  
29. [illegible]  
30. [illegible]  
31. [illegible]  
32. [illegible]  
33. [illegible]  
34. [illegible]  
35. [illegible]  
36. [illegible]  
37. [illegible]  
38. [illegible]  
39. [illegible]  
40. [illegible]  
41. [illegible]  
42. [illegible]  
43. [illegible]  
44. [illegible]  
45. [illegible]  
46. [illegible]  
47. [illegible]  
48. [illegible]  
49. [illegible]  
50. [illegible]  
51. [illegible]  
52. [illegible]  
53. [illegible]  
54. [illegible]  
55. [illegible]  
56. [illegible]  
57. [illegible]  
58. [illegible]  
59. [illegible]  
60. [illegible]  
61. [illegible]  
62. [illegible]  
63. [illegible]  
64. [illegible]  
65. [illegible]  
66. [illegible]  
67. [illegible]  
68. [illegible]  
69. [illegible]  
70. [illegible]  
71. [illegible]  
72. [illegible]  
73. [illegible]  
74. [illegible]  
75. [illegible]  
76. [illegible]  
77. [illegible]  
78. [illegible]  
79. [illegible]  
80. [illegible]  
81. [illegible]  
82. [illegible]  
83. [illegible]  
84. [illegible]  
85. [illegible]  
86. [illegible]  
87. [illegible]  
88. [illegible]  
89. [illegible]  
90. [illegible]  
91. [illegible]  
92. [illegible]  
93. [illegible]  
94. [illegible]  
95. [illegible]  
96. [illegible]  
97. [illegible]  
98. [illegible]  
99. [illegible]  
100. [illegible]

# LIME SULFUR

PRINCIPAL FORMULATIONS:      Containing about 30% of calcium polysulphide, various small amounts of calcium thiosulphate. The balance is mostly water and free sulfur. Dry lime sulfur.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Cattle	Safe Chemicals*	(Calcium polysulfide)	No time limitations*
Goats			
Hogs		1.66% to 2% in water. 1% or 2% in dusts*	
Poultry			
Sheep			
Plants, generally during grow- ing season	Safe Chemical	0.4% to 0.6% water sprays	No time limitations
Trees and shrubs dormant or delayed dormant period	Safe Chemical	4% to 5%	No time limitations

\*Applies to all uses in this group.



RECEIVED FROM THE  
 THE HON. THE SECRETARY  
 THE HON. THE SECRETARY  
 THE HON. THE SECRETARY

NAME	ADDRESS	CITY	COUNTRY
J. A. Smith	123 Main St	New York	USA
J. B. Jones	456 Elm St	London	UK
J. C. Brown	789 Oak St	Paris	France
J. D. White	101 Pine St	Tokyo	Japan
J. E. Black	202 Cedar St	Sydney	Australia
J. F. Green	303 Birch St	Melbourne	Australia
J. G. Hall	404 Spruce St	Auckland	New Zealand
J. H. King	505 Willow St	Wellington	New Zealand
J. I. Lee	606 Ash St	Christchurch	New Zealand
J. J. Scott	707 Hickory St	Dunedin	New Zealand
J. K. Adams	808 Sycamore St	Invercargill	New Zealand
J. L. Baker	909 Magnolia St	Nelson	New Zealand
J. M. Carter	1010 Dogwood St	Blenheim	New Zealand
J. N. Evans	1111 Redwood St	Picton	New Zealand
J. O. Fisher	1212 Cypress St	Hastings	New Zealand
J. P. Gibson	1313 Juniper St	Napier	New Zealand
J. Q. Harlow	1414 Fir St	Palmerston North	New Zealand
J. R. Ingram	1515 Laurel St	Hamilton	New Zealand
J. S. Jordan	1616 Birch St	Tauranga	New Zealand
J. T. Keith	1717 Spruce St	Rotorua	New Zealand
J. U. Lester	1818 Cedar St	Whakatane	New Zealand
J. V. Martin	1919 Willow St	Whangarei	New Zealand
J. W. Nash	2020 Ash St	Dargaville	New Zealand
J. X. Olsen	2121 Hickory St	Kaitiaki	New Zealand
J. Y. Parker	2222 Sycamore St	Mangonui	New Zealand
J. Z. Quinn	2323 Dogwood St	Whangarei	New Zealand
J. A. Reed	2424 Redwood St	Whangarei	New Zealand
J. B. Shaw	2525 Cypress St	Whangarei	New Zealand
J. C. Taylor	2626 Juniper St	Whangarei	New Zealand
J. D. Vance	2727 Fir St	Whangarei	New Zealand
J. E. Webb	2828 Laurel St	Whangarei	New Zealand
J. F. Wright	2929 Birch St	Whangarei	New Zealand

LINDANE  
Gamma isomer of 1,2,3,4,5,6-hexachlorocyclohexane

PRINCIPAL FORMULATIONS: 1% to 3% dusts; 25% wettable powder; emulsifiable concentrate containing 1.6 lbs. per gallon; 100% crystals

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Alfalfa	N.R.	1.25	Soil application, early season or immediately after cutting. Do not apply when new growth is over 4 inches tall.
Apples	10	2	60 days. Do not apply after the edible parts start to form.
Apricots	10	1.5	Apply on the trunks and larger branches from the lower crotch to the ground. Do not apply to foliage or fruit.
	10	2	Foliage spray. Do not apply within 60 days of harvest.
Asparagus	10	0.5	Post-cutting application only
Avocados	10	1	Apply only just before blossoming or just after the fruit is set.
Barley	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Beans	10	0.3	Do not apply after the edible parts start to form.
	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Broccoli	10	0.3	Do not apply after the edible parts start to form.
Brussels sprouts	10	0.3	Do not apply after the edible parts start to form.



LINDANE

Gamma isomer of 1,2,3,4,5,6-hexachlorocyclohexane

PRINCIPAL FORMULATIONS: 1% to 3% dusts; 25% wettable powder; emulsifiable concentrate containing 1.6 lbs. per gallon; 100% crystals

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Blueberries	N.R.	0.5	Do not apply after the edible fruit starts to form.
Cabbage	10	0.3	Do not apply after the edible parts start to form.
Cantaloupes	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Carrots	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Cauliflower	10	0.3	Do not apply after the edible parts start to form.
Celery	10	0.3	Do not apply after the celery is half grown or after it begins to bunch.
Cherries	10	1	Apply on the trunks and larger branches from the lower crotch to the ground. Do not apply to foliage or fruit.
Citrus fruits	10	2	Do not apply after the fruit starts to form.
Clover	N.R.	1.25	Soil application, early season or immediately after cutting. Do not plant in rotation with root crops. Do not apply when new growth is over 4 inches tall.
Collards	10	0.3	Apply only at seedling stage.



LINDANE

Gamma isomer of 1,2,3,4,5,6-hexachlorocyclohexane

PRINCIPAL FORMULATIONS: 1% to 3% dusts; 25% wettable powder; emulsifiable concentrate containing 1.6 lbs. per gallon; 100% crystals

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Corn	10	1.0	Do not feed treated forage to dairy animals or animals being finished for slaughter.
	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Cotton	N.R.	0.3	No time limitations
		0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Cranberries	N.R.	0.5	Do not apply after the fruit starts to form.
Cucumbers	10	0.5	Remove excess residues from cucumbers.
		0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Currants	N.R.	0.5	Do not apply after the fruit starts to form.
Eggplant	10	0.5	Do not apply after the edible parts start to form.
Gooseberries	N.R.	0.5	Do not apply after the fruit starts to form.
Grapes	10	0.75	Do not apply after the fruit starts to form.



LINDANE

Gamma isomer of 1,2,3,4,5,6-hexachlorocyclohexane

PRINCIPAL FORMULATIONS: 1% to 3% dusts; 25% wettable powder; emulsifiable concentrate containing 1.6 lbs. per gallon; 100% crystals

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Guavas	10	1	Apply only just before blossoming or just after the fruit is set.
Kale	10	0.3	Do not apply after the edible parts start to form.
Kohlrabi	10	0.3	Do not apply after the edible parts start to form.
Lettuce	10	0.4	Do not apply to leaf lettuce after the seedling stage. Do not apply to head lettuce after the heads start to form.
	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Mangoes	10	1	Apply only just before blossoming or just after fruit is set.
Melons, including cantaloupes	10	0.5	No time limitations
Milo	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Mushrooms and mushroom houses	10	1.25 lbs. 1% dust per 16,000 sq.ft.	7 days
Mustard greens	10	0.3	Apply only at seedling stage.
Nectarines	10	1	60 days



# TABLE

Summary of the results of the investigation

The results of the investigation are summarized in the following table:

No.	Name	Results	
		1	2
1	John Doe	100	100
2	Jane Smith	95	95
3	Robert Johnson	90	90
4	Emily White	85	85
5	Michael Brown	80	80
6	Sarah Green	75	75
7	David Black	70	70
8	Lisa Gray	65	65
9	James Blue	60	60
10	Anna Red	55	55
11	Thomas Yellow	50	50
12	Michelle Purple	45	45
13	Christopher Orange	40	40
14	Stephanie Pink	35	35
15	Andrew Silver	30	30
16	Rebecca Gold	25	25
17	Jonathan Bronze	20	20
18	Karen Copper	15	15
19	Benjamin Iron	10	10
20	Christina Steel	5	5

LINDANE

Gamma isomer of 1,2,3,4,5,6-hexachlorocyclohexane

PRINCIPAL FORMULATIONS: 1% to 3% dusts; 25% wettable powder; emulsifiable concentrate containing 1.6 lbs. per gallon; 100% crystals

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Oats	N.R.	0.6	Do not apply after the heads start to form.
Okra	N.R.	0.25 oz. to 4 oz./100 lbs. seed	No time limitations
Onions	10	1	Do not apply to green or spring onions.
	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Peaches	10	1.5	Apply to the trunks and larger branches from the lower crotch to the ground. Do not apply to foliage or fruit.
	10	2	Foliage spray - 60 days
Pears	10	2	60 days
Peas	10	0.3	Do not apply after the pods start to form.
	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Peppers	10	0.3	Do not apply after the edible parts start to form.



LINDANE

Gamma isomer of 1,2,3,4,5,6-hexachlorocyclohexane

PRINCIPAL FORMULATIONS: 1% to 3% dusts; 25% wettable powder; emulsifiable concentrate containing 1.6 lbs. per gallon; 100% crystals

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Plums	10	1	Apply on the trunks and larger branches from the lower crotch to the ground. Do not apply to foliage or fruit.
	10	1	Foliage spray - 60 days
Pumpkins	10	0.5	No time limitations
Quinces	10	2	60 days
Rye	N.R.	0.6	Do not apply after the heads start to form.
Small grains	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Spinach	10	0.4	Do not apply after the seedling stage.
Squash	10	0.5	Remove excess residues from squash.
Strawberries	10	0.15	Do not apply after the fruit starts to form.
Sugar beets	N.R.	0.5	Do not feed treated tops to dairy animals or animals being finished for slaughter.
	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Sweetpotatoes	N.R.	0.5	Transplant water application only, at time of transplanting

TABLE

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

LINDANE

Gamma isomer of 1,2,3,4,5,6-hexachlorocyclohexane

PRINCIPAL FORMULATIONS: 1% to 3% dusts; 25% wettable powder; emulsifiable concentrate containing 1.6 lbs. per gallon; 100% crystals

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Swiss chard	10	0.4	Do not apply after the seedling stage.
Tomatoes	10	0.3	Do not apply after the fruit starts to form.
	N.R.	0.25 oz. to 4 oz./100 lbs. seed	Seed treatment only
Walnuts	N.R.	1.5	Only one application to be made before the nuts are 1/2 inch in diameter
Wheat	N.R.	0.6	Do not apply after the heads start to form.
Soil application for non-root crops	N.R.	1	Preplanting or at time of planting for non-root crops only
Beef cattle, goats, hogs, sheep	N.R.	Water spray or dip, 0.06%	Do not use sprays containing more than 0.06%. Do not treat dairy animals or animals being finished for slaughter.



LINDANE

Gamma isomer of 1,2,3,4,5,6-hexachlorocyclohexane

PRINCIPAL FORMULATIONS: 1% to 3% dusts; 25% wettable powder; emulsifiable concentrate containing 1.6 lbs. per gallon; 100% crystals

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Forage Crops	p.p.m.	lbs./A.	
Alfalfa			
Clover			
Corn	N.R.*	1.25*	Preplanting soil application only*
Cowpeas			
Lespedeza			
Sorghum			
Soybeans			
Forage Crops			
Alfalfa			
Clover			
Corn	Restrictive labeling*	1*	Do not feed treated forage to dairy animals or animals being finished for slaughter.*
Cowpeas			
Lespedeza			
Sorghum			
Soybeans			
Grass	Restrictive labeling	1.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.

\* Applies to all uses in this group.





# MAGNESIUM ARSENATE

PRINCIPAL FORMULATIONS: Marketed as a high percentage wettable powder, also in various percentages as a dust application.\*

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Beans	p.p.m. as As <sub>2</sub> O <sub>3</sub>  3.5	lbs./A.  15	Do not use after pods begin to form.

\*These products are quite uncommon at the present time.



## MALATHION

(O-O-dimethyl dithiophosphate of diethyl mercaptosuccinate)

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 5 lbs. per gallon;  
25% wettable powder; 4% or 5% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	8	7.5	3 days
Apricots	8	7.0	7 days
Artichokes	N.R.	1.25	10 days
Avocados	8	5.0	7 days
Beans	8	1.75	3 days
Beets	8	2.5	7 days
Blackberries	N.R.	1.5	Not after fruit begins to form
Blueberries	8	2.5	3 days
Broccoli	8	2.5	3 days
Brussels sprouts	8	2.5	7 days
Cabbage	8	2.5	7 days
Cauliflower	8	2.5	7 days
Celery	8	1.5	7 days
Cherries	8	6.0	3 days
Clover	8	1.25	7 days
Corn	N.R.	1.25	
Cotton	N.R. (cottonseed)	1.5	7 days
Cranberries	8	1.5	3 days



MALATHION  
(O-O-dimethyl dithiophosphate of diethyl mercaptosuccinate)

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 5 lbs. per gallon;  
25% wettable powder; 4% or 5% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Cucumbers	8	1.75	1 day
Currants	N.R.	1.25	Do not apply after the edible parts start to form.
Dates	8	2.0	7 days
Eggplant	8	1.75	3 days
Gooseberries	N.R.	1.25	Do not apply after the edible parts start to form.
Grapefruit	8	10.0 .75	7 days (cover sprays) 3 days (bait sprays)
Grapes	8	1.6	3 days
Kale	8	2.5	7 days
Kumquats	8	10.0 .75	7 days (cover sprays) 3 days (bait sprays)
Lemons	8	10.0	7 days (cover sprays) 3 days (bait sprays)
Lettuce	8	2.0	10 days
Limes	8	10.0 .75	7 days (cover sprays) 3 days (bait sprays)
Mangoes	8	.75	2 days
Melons	8	1.75	1 day
Mustard greens	8	2.5	7 days



MALATHION

(O-O-dimethyl dithiophosphate of diethyl mercaptosuccinate)

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 5 lbs. per gallon;  
25% wettable powder; 4% or 5% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Oranges	8	10.0 .75	7 days (cover sprays) 3 days (bait sprays)
Passion fruit	8	.75	2 days
Peaches	8	7.0	7 days
Pears	8	6.5	3 days
Peas	8	1.25	3 days
Pecans	N.R.	7.5	60 days
Peppers	8	1.25	3 days
Pineapples	8	5.0	7 days
Potatoes	8	2.5	No time limitations
Plums	8	6.0	3 days
Prunes	8	5.0	3 days
Pumpkins	N.R.	1.75	10 days
Onions (including green)	8	2.0	3 days for green onions
Raspberries	N.R.	1.5	Do not apply after the edible parts start to form.
Rutabagas	8	2.5	3 days
Spinach	8	1.5	7 days
Squash (summer and winter)	8	1.75	1 day





MALATHION

(O-O-dimethyl dithiophosphate of diethyl mercaptosuccinate)

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 5 lbs. per gallon;  
25% wettable powder; 4% or 5% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Strawberries	8	2.0	3 days
Tangeloes	8	10.0 .75	7 days (cover sprays) 3 days (bait sprays)
Tangerines	8	10.0 .75	7 days (cover sprays) 3 days (bait sprays)
Tomatoes	8	2.0	3 days
Turnips (including tops)	8	2.5	3 days
Alfalfa	8	1.5	7 days



MALEIC HYDRAZIDE  
(1,2 dihydro-pyridizine-3,6-dione)

PRINCIPAL FORMULATIONS: 30% liquid, 40% wettable powder; formulation used in sodium and diethanolamine salts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Grass suppression along highways and in orchard land	N.R.	lbs./A. 10	Apply in spring, summer, fall prior to mowing.*
Quack grass sod	N.R. (in crops grown in treated soil)	10	Apply in spring when quack grass is 4"-10". Plow and turn under 4-8 days later.
Wild onion and garlic in pasture	N.R.	15	Apply in spring or fall when 95% of bulbs have started growth.*

\*There should be a warning against cutting treated grass area for hay or pasturing it off.



MANEB  
(Manganous ethylene bisdithiocarbamate)

PRINCIPAL FORMULATIONS: 70% wettable powder; 3.5%, 5.6%, 6.0%, 7.0%, and 8.0% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Almonds	0.1	7.5	California: petal fall (180-200 days before harvest)*
Apples	7	8.4	Pacific Northwest: cover sprays, no time limitations.
Beans, lima	7	3.0	No time limitations
Beans, string	7	2.1	4 days
Carrots	7	3.0	No time limitations
Celery	7	3.0	No time limitations (remove excess residues by stripping, trimming, and washing).
Cotton	N.R.	3.5	Seed row treatment at planting time only.
Cranberries	7	7.5	New Jersey: 4 weeks after mid- bloom (35-55 days before harvest)
Cucumbers	7	3.0	No time limitations
Figs	7	3.0	10-20 days
Grapes	7	3.0	Great Lakes area: 10 days after bloom (70 days before harvest)*
Melons	7	3.0	No time limitations
Onions	7	3.0	No time limitations
Peaches	7	7.0	14 days
Potatoes	0.1	3.0	No time limitations

\*Cultural limitations - not required to meet tolerance.



(Manganous ethylene bisdithiocarbamate)

PRINCIPAL FORMULATIONS: 70% wettable powder; 3.5%, 5.6%, 6.0%, 7.0%, and 8.0% dusts

USE .	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Spinach	7	3.0	7 days (remove excess residues by washing).
Squash (summer & winter)	7	3.0	No time limitations
Tomatoes	7	3.0	No time limitations





MCPA  
2-methyl-4-chlorophenoxyacetic acid

PRINCIPAL FORMULATIONS: Technical MCPA (liquid); 25.8% potassium salt; 23.2% sodium salt; 50% and 57% dimethylamine salts; 33.2% and 60% diethanolamine salts; 57% and 69% ethanol and isopropanolamine salts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Barley	N.R.*	lbs./A.	Apply in tiller to early boot stage.*
Oats		1.5*	
Rye		(seeded to red, alsike, or ladino clover)	
Wheat			
Barley	N.R.*	0.5*	Apply when grain is 2-3 inches tall.*
Oats		(seeded to alfalfa, sweet clover, birdsfoot, trefoil, vetch)	
Rye			
Wheat			
Corn	N.R.*	1.5	When corn is 3 inches tall
Flax		.25	When 3-4 inches tall and before buds form
Peas		.5	When 3-7 inches tall
		.75	When Canada thistle buds appear (20-35 days pre-harvest)
Rice		1.5	When rice is 6-8 inches above water
Sorghum		.85	When 6 inches tall and before tasseling

\*Applies to all uses in this group.



# MERCURIC CHLORIDE

PRINCIPAL FORMULATIONS: 99% soluble powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Potatoes	N.R.	4 oz./30 gals. water	Seed potato treatment. Soak uncut tubers 1-1/2 hours.



# MERCURIC OXIDE

PRINCIPAL FORMULATIONS: 98% soluble powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Potatoes	N.R.	1 lb./30 gal. 4.9 lbs./A.	Seed piece treatment only  Soil treatment applied with fertilizer



# MERCUROUS CHLORIDE

PRINCIPAL FORMULATIONS: 99.6% powder; 4.0% dust

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
<p>Cole crops</p> <p>Onions</p> <p>Radishes</p> <p>Turnips</p>	N.R.*	<p>lbs./A. in lime</p> <p>4.0*</p>	<p>Applied around the base of the young plants with 2 or 3 repeated applications. In some cases the roots of transplants are dipped in a 4% dust. The seeds may also sometimes be treated at the rate of 1.5 lbs. per 100 lbs. of seed. Early season use only.*</p>

\* Applies to all uses.





# METALDREYDE

PRINCIPAL FORMULATIONS: 1.10% in bait mixtures with other insecticides

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Truck and garden crops	N.R.	1%-10% baits 1 lb./200 sq. ft.	Spread baits on ground around plants - avoid contamination of foliage.



METHOXYCHLOR  
2,2-(p-methoxyphenyl)-1,1,1-trichloroethane

PRINCIPAL FORMULATIONS: 50% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 5% to 10% dusts; aerosol and pressurized formulations containing 2% or 3% together with other ingredients; concentrated mixtures intended for application in fog generators

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	14	15.0	7 days
Apricots	14	6.0	21 days
Asparagus	14	2.25	3 days
Barley	2	200 mg./ sq. ft. *	Empty grain bin treatment only
Beans	14	2.25	7 days
Beets	14	2.25	7 days (14 days if treated tops are to be used for food or feed)
Blackberries	14	3.0	14 days
Blackeyed peas	14	3.0	7 days
Blueberries	14	2.25	14 days
Broccoli	14	2.25	14 days
Brussel sprouts	14	2.25	14 days
Cabbage	14	2.25	7 days
Carrots (with or without tops)	14	2.25	7 days (14 days if treated tops are to be used for food or feed)
Cauliflower	14	2.25	7 days
Cherries	14	8.0	7 days
Collards	14	2.25	14 days

\*Applications made as a residual spray to empty grain storage bins or flour mills, using up to 5.0% in water or oil at the rate of 1 gal./500 sq. ft.



METHOXYCHLOR  
2,2-(p-methoxyphenyl)-1,1,1-trichloroethane

PRINCIPAL FORMULATIONS: 50% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 5% to 10% dusts; aerosol and pressurized formulations containing 2% or 3% together with other ingredients; concentrated mixtures intended for application in fog generators

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Corn	14	2.25	7 days
Corn	14	3.0	14 days
Corn	2	200 mg./ sq. ft. *	Empty grain bin treatment only
Cranberries	14	2.25	14 days
Cucumbers	14	2.25	7 days
Currants	14	3.0	14 days
Eggplant	14	2.25	7 days
Gooseberries	14	3.0	14 days
Grapes	14	6.0	14 days
Huckleberries	14	2.25	14 days
Kale	14	2.25	14 days
Kohlrabi	14	2.25	7 days
Lettuce	14	2.25	14 days
Loganberries	14	3.0	14 days
Melons	14	2.25	7 days
Mushrooms	14	100-150 mg./ sq. ft.	Applied as spray to beds, walls, posts, etc., when mushrooms are not present. Usually 2.5% to 5% methoxychlor in water-base spray.
Nectarines	14	2.0	21 days

\*Application made as a residual spray to empty grain storage bins or flour mills, using up to 5.0% in water or oil at the rate of 1 gal./500 sq. ft.



METHOXYCHLOR  
2,2-(p-methoxyphenyl)-1,1,1-trichloroethane

PRINCIPAL FORMULATIONS: 50% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 5% to 10% dusts; aerosol and pressurized formulations containing 2% or 3% together with other ingredients; concentrated mixtures intended for application in fog generators

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Oats	2	200 mg./ sq. ft. *	Empty grain bin treatment only
Onions**	N.R.	2.25	7 days
Peaches	14	6.0	21 days
Peanuts (nuts)	14	3.0	7 days
Pears	14	8.0	7 days
Peas	14	2.25	7 days
Peppers	14	2.25	7 days
Pineapples	14	2.25	7 days
Potatoes	N.R.	2.25	No time limitations
Plums (fresh prunes)	14	8.0	7 days
Pumpkins	14	2.25	7 days
Quinces	14	6.0	7 days
Radishes	14	2.25	7 days
Raspberries	14	3.0	14 days
Rice	2	200 mg./ sq. ft. *	Empty grain bin treatment only
Rutabagas	14	3.0	7 days
Rye	2	200 mg./ sq. ft. *	Empty grain bin treatment only

\*Applications made as a residual spray to empty grain storage bins or flour mills, using up to 5.0% in water or oil at the rate of 1 gal./500 sq. ft.

\*\*Methoxychlor should not be used on green or spring onions.





METHOXYCHLOR  
2,2-(p-methoxyphenyl)-1,1,1-trichloroethane

PRINCIPAL FORMULATIONS: 50% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 5% to 10% dusts; aerosol and pressurized formulations containing 2% or 3% together with other ingredients; concentrated mixtures intended for application in fog generators

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Sorghum grain	2	200 mg./ sq. ft.	Empty grain bin treatment only
Spinach	14	2.25	14 days
Squash	14	2.25	7 days
Strawberries	14	2.25	14 days
Summer squash	14	2.25	7 days
Sweetpotatoes	N.R.	2.25	No time limitations
Tomatoes	14	2.25	7 days
Turnips	14	2.25	7 days (14 days if treated tops are to be used for food or feed)
Wheat	2	200 mg./ sq. ft. *	Empty grain bin treatment only
Alfalfa			
Clover			
Forage Legumes	100**	1.5** 3 **	7 days ** 14 days **
Cowpeas			
Peanuts			
Soybeans			
Velvet beans			
Vetch			

\*Applications made as a residual spray to empty grain storage bins or flour mills, using up to 5.0% in water or oil at the rate of 1 gal./500 sq. ft.

\*\*Applies to all uses in this group.



METHOXYCHLOR  
2,2-(p-methoxyphenyl)-1,1,1-trichloroethane

PRINCIPAL FORMULATIONS: 50% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 5% to 10% dusts; aerosol and pressurized formulations containing 2% or 3% together with other ingredients; concentrated mixtures intended for application in fog generators

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	P.P.M.		
Beef cattle and hogs	3 (in fat)	5% in oil	Treatment from rubbing devices or cattle oilers
Beef cattle, hogs, and sheep	3 (in fat)	Water, dip, and spray formulations containing up to 1.0%	Liberal applications to the animal, using one or two quarts per larger animal and reduced amounts for smaller animals.
Beef cattle, hogs, and sheep	3 (in fat)	Mist spray in oil applications containing 0.5%	These applications are applied on a mist basis at the rate of 1-2 oz. of the spray per animal, except hogs, where liberal applications are justified. The maximum dosage is 2.5 oz. of the distillate spray per animal the size of an adult cow.* The maximum treatment should not be applied more often than once every 3 weeks. Daily applications at the rate of one or two oz. per animal are acceptable. In all cases there should be a warning against wetting the hide of animals other than hogs. Other ingredients are usually present in these formulations to justify the insecticidal claims.
Beef cattle, hogs, and sheep	3 (in fat)	Dusts containing up to 50%	Thorough treatment of the animals, working the powder into the hair.

\*To avoid burning of the hide by the oil.



METHOXYCHLOR  
2,2-(p-methoxyphenyl)-1,1,1-trichloroethane

PRINCIPAL FORMULATIONS: 50% wettable powder; emulsifiable concentrate containing 2 lbs. per gallon; 5% to 10% dusts; aerosol and pressurized formulations containing 2% or 3% together with other ingredients; concentrated mixtures intended for application in fog generators

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Grass forage	100	1.5	7 days
		3	14 days



METHOXY ETHYL MERCURY ACETATE

PRINCIPAL FORMULATIONS: 4.88% and 11.4% liquids; 24.0% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		oz./bu.	
Barley	Restrictive labeling	3/4	Seed treatment only. Do not use treated seed for food or feed.
Cottonseed	Restrictive labeling	1-1/2	Seed treatment only. Do not use treated seed for food or feed.
Flax	Restrictive labeling	2	Seed treatment only. Do not use treated seed for food or feed.
Oats	Restrictive labeling	3/4	Seed treatment only. Do not use treated seed for food or feed.
Rice	Restrictive labeling	3/4	Seed treatment only. Do not use treated seed for food or feed.
Sorghum	Restrictive labeling	3/4	Seed treatment only. Do not use treated seed for food or feed.
Wheat	Restrictive labeling	3/4	Seed treatment only. Do not use treated seed for food or feed.





# METHYL BROMIDE

PRINCIPAL FORMULATIONS: 98.0% compressed gas; 26.0% liquid

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Barley	p.p.m.		
Corn			
Grain sorghum (milo)	50*	0.3 gals./1000 bushels*	No time limitations <sup>1/</sup> *
Oats			
Rice			
Rye			
Wheat			
Alfalfa hay	50		
Apples	5		
Beans	50		
Beets	30		
Blackeyed peas	50	3 lbs./1000 cu. ft.*	No time limitations <sup>2/</sup> *
Cocoa beans	50		
Cottonseed	200		
Eggplants	20		
Green beans	50		

1/ Always used in combination with other volatile fumigants.

2/ A tightly sealed fumigation chamber is required.

\* Applies to all uses in this group.



METHYL BROMIDE

PRINCIPAL FORMULATIONS: 98.0% compressed gas; 26.0% liquid

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.		
Lima beans	50		
Onions	20		
Pears	5		
Potatoes	75		
Quinces	5	3 lbs./1000 cu. ft.*	No time limitations <sup>1/</sup> *
Rutabagas	30		
Snap beans	50		
Sweetpotatoes	75		
Tomatoes	20		
Turnips	30		
Preplanting soil treatment	N.R.	2 lbs./100 sq. ft.	Aerate for at least 72 hours to prevent injury to plants.

1/ A tightly sealed fumigation chamber is required.

\* Applies to all uses in this group.



METHYL PARATHION  
(O,O-dimethyl O-p-nitrophenyl phosphorothioate)

PRINCIPAL FORMULATIONS: Emulsifiable concentrate containing 2 lbs. per gallon;  
1% and 2.5% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Alfalfa	N.R.	0.5	No application within 20 days of harvest or pasturing
Barley	N.R.	0.5	Do not apply after the heads start to form.
Cotton	N.R.	0.5	15 days before hand picking
Oats	N.R.	0.5	Do not apply after the heads start to form.
Rye	N.R.	0.5	Do not apply after the heads start to form.
Vetch	N.R.	0.5	No application within 20 days of harvest or pasturing
Wheat	N.R.	0.5	Do not apply after the heads start to form.



MGK REPELLENT 11  
2,3,4,5-bis(2-butylene) tetrahydro furfural

PRINCIPAL FORMULATIONS: 0.2% in petroleum distillate, in combination with  
other insecticidal ingredients

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Cattle (including dairy cattle)	N.R.	0.2% in distillate	Mist spray. Do not wet hides of animals.





# MINERAL OIL

PRINCIPAL FORMULATIONS: Liquids and smears containing 20%-73% oil with other insecticidal ingredients, as for control of screw worms.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Beef cattle Dairy cattle Goats Hogs Sheep	N.R.*	Apply the formulations liberally and freely to wounds and abrasions.*	No time limitations*

\*Applies to all uses.



MONURON  
3-(p-chlorophenyl)-1,1-dimethylurea

PRINCIPAL FORMULATIONS: 80% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Asparagus	1	3.2	Pre-emergence (7-28 days before cutting).
Cottonseed	1	1.0	42-56 days
Grapefruit	1	1.6	Apply late September - early October. Avoid spraying fruit.
Grapes	1	3.2	100-200 days
Lemons	1	1.6	Apply late September - early October. Avoid spraying fruit.
Onions	1	1.6	Pre-emergence, 2 days before onions emerge. Final, 21-28 days before harvest, apply to ground.
Oranges	1	1.6	Apply late September - early October. Avoid spraying fruit.
Peppermint	N.R.	2.4	Pre-emergence, after last cultivation. Apply only to established stands.
Pineapples	1	4.8	Just after planting (18 months).
Spinach	1	0.8	At planting (40-55 days).
Sugar cane	1	4.8	Pre-emergence, just after planting.
Irrigation ditches	N.R.	32-80	Non-cropped season.



NABAM  
Disodium ethylene bisdithiocarbamate

PRINCIPAL FORMULATIONS: 19% liquid

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Potatoes	N.R.	Seed piece treatment (dip)  Dilute 1 part with 30 gals. water.	Plant at once or after drying.



N-Ethylmercuri-1,2,3,6-tetrahydro-3,6-endo-  
methano-3,4,5,6,7,7-hexachlorophthalimide  
"Emmi"\*

PRINCIPAL FORMULATIONS: 10.34% emulsifiable concentrate  
10.00% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		oz./bu.	
Barley	N.R.	0.5	Seed treatment only
Flax	N.R.	1.5	Seed treatment only
Oats	N.R.	0.5	Seed treatment only
Rye	N.R.	0.5	Seed treatment only
Wheat	N.R.	0.5	Seed treatment only

\*"Emmi" is a registered trade mark of the Velsicol Corporation





# NICOTINE SULFATE

PRINCIPAL FORMULATIONS: 40% aqueous solution (nicotine)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	2	4	3 days
Apricots	2	4*	3 days
Artichokes	2	1	3 days
Asparagus	2	1	3 days
Avocados	2	1	3 days
Beans	2	1	3 days
Beets	2	1	7 days
Blackberries	2	1	3 days
Blackeyed peas	2	1	3 days
Broccoli	2	1	3 days
Brussels sprouts	2	1	7 days
Cabbage	2	1	7 days
Cauliflower	2	1	7 days
Celery	2	1	7 days
Cherries	2	4*	3 days
Citrus fruits	2	8	3 days
Collards	2	1	7 days
Corn	2	1	3 days

\*Spray



NICOTINE SULFATE

PRINCIPAL FORMULATIONS: 40% aqueous solution (nicotine)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Cucumbers	2	1	3 days
Currants	2	1	3 days
Eggplants	2	1	3 days
Gooseberries	2	1	3 days
Grapes	2	1	3 days
Kale	2	1	7 days
Kohlrabi	2	1	7 days
Lettuce	2	1	7 days
Loganberries	2	1	3 days
Melons	2	1	3 days
Mustard greens	2	1	7 days
Nectarines	2	4*	3 days
Okra	2	1	3 days
Onions	2	1	3 days
Parsley	2	1	7 days
Parsnips	2	1	3 days
Peaches	2	4*	3 days
Peas	2	1	3 days

\*Spray



NICOTINE SULFATE

PRINCIPAL FORMULATIONS: 40% aqueous solution (nicotine)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Peppers	2	1	3 days
Plums	2	4*	3 days
Quinces	2	4*	3 days
Raspberries	2	1	3 days
Rutabagas	2	1	3 days
Spinach	2	1	7 days
Squash	2	1	3 days
Strawberries	2	1	3 days
Summer squash	2	1	3 days
Swiss chard	2	1	7 days
Tomatoes	2	1	3 days
Turnips	2	1	7 days
Poultry	N.R.	12%-40% in water or oil (roost paint)	No time limitations

\*Spray



NPA  
(N-1 naphthyl phthalamic acid)

PRINCIPAL FORMULATIONS: 90% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Asparagus (seed beds)	N.R.	7.2	Pre-emergence. Apply 24-48 hours after seeding as area treatment.
(established beds)	N.R.	7.2	Apply 48 hours after first spring discing. (60-75 days)
Cantaloupes	N.R. N.R.	5.4 3.6	Pre-emergence (90-120 days) Post-emergence. Apply immediately after transplanting or just before vining and before weeds emerge. (50-80 days)
Cucumbers	N.R. N.R.	5.4 3.6	Pre-emergence (50-70 days) Post-emergence. Apply immediately after transplanting or just before vining and before weeds emerge. (25-35 days)
Muskmelons	N.R. N.R.	5.4 3.6	Pre-emergence (50-70 days) Post-emergence. Apply immediately after transplanting or just before vining and before weeds emerge. (25-35 days)
Pumpkins	N.R.	3.6	Pre-emergence (100-130 days) Some varieties are injured by NPA.
Squash	N.R.	3.6	Pre-emergence (50-110 days) Some varieties are injured by NPA.
Watermelons	N.R. N.R.	5.4 3.6	Pre-emergence (100-125 days) Post-emergence. Apply immediately after transplanting or just before vining and before weeds emerge. (60-80 days)





NPA (AMIDE FORM)  
(N-1 naphthyl phthalimide)

PRINCIPAL FORMULATIONS: 90% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Sweetpotatoes <sup>1/</sup>	N.R.	lbs./A. 3.6 <sup>2/</sup>	Slip treatment. Apply as over-the-top area spray immediately after planting.
	N.R.	3.6	Lay-by application. Apply immediately after last cultivation as an over-the-top spray. (40-75 days before harvest)

1/ Use limited to Iowa, Indiana, Missouri, and Virginia.

2/ For band treatment, use proportionately lower dosages.



N-PHENYL-MERCURI-ETHYLENEDIAMINE

PRINCIPAL FORMULATIONS: 10% liquid; 10% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Almonds	0	0.8	Apply only in popcorn stage. Do not use treated hulls for food or feed.
Apples	0	0.25	Apply in blossom through petal fall stages.
Pears	0	0.25	Apply in blossom through petal fall stages.



OVEX  
(p-chlorophenyl-p-chlorobenzenesulfonate)

PRINCIPAL FORMULATIONS: 5%-10% dust; 40% or 50% wettable powders;  
20% emulsifiable concentrate

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Almonds	N.R.	4	Pre-blossom spray only
Apples	3	2.5	30 days
Cherries	N.R.	4	Post-harvest treatment only
Cotton	N.R.	2.5	Do not feed cotton trash to dairy animals or animals being finished for slaughter.
Grapefruit	5	4	14 days
Lemons	5	4	14 days
Oranges	5	4	14 days
Peaches	3	4	30 days
Pears	3	4	30 days
Plums	3	4	30 days
Prunes	3	4	30 days
Strawberries	N.R.	1.5	Post-harvest treatment only
Tangerines	5	4	14 days
Walnuts	N.R.	4	14 days



PARADICHLOROBENZENE

PRINCIPAL FORMULATIONS: Technical crystalline material

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Peaches	N.R.	.75-1.0 oz. around tree	The crystals are distributed uniformly around the tree and soil mounded over them. No time limitations.





PARATHION  
(O,O-diethyl O-p-nitrophenyl phosphorothioate)

PRINCIPAL FORMULATIONS: 15% and 25% wettable powders; 1% and 2% dusts;  
25% emulsifiable concentrates; 10% aerosol formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Alfalfa	1	.5	15 days
Apples	1	2.5	14 days
Apricots	1	2.5	14 days
Artichokes	1	.5	15 days
Asparagus	N.R.	.6	Post-cutting season
Avocados	1	2.5	21 days
Barley	1	.4	15 days
Beans	1	.5	15 days
Beets	1	.5	15 days (21 days if treated tops are to be used for food or feed)
Blackberries	1	.5	Do not apply after the edible parts start to form.
Blackeyed peas	1	.4	15 days
Blueberries	1	.4	Apply only before fruit sets or after harvest.
Boysenberries	N.R.	.4	Apply only before bloom or after harvest.
Broccoli	1	.5	21 days
Brussels sprouts	1	.5	21 days
Cabbage	1	.5	21 days



PARATHION  
(O,O-diethyl O-p-nitrophenyl phosphorothioate)

PRINCIPAL FORMULATIONS: 15% and 25% wettable powders; 1% and 2% dusts;  
25% emulsifiable concentrates; 10% aerosol formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Carrots	1	.45	15 days (21 days if treated tops are to be used for food or feed)
Cauliflower	1	.5	21 days
Celery	1	.4	15 days
Cherries	1	1.2	14 days
Citrus fruits	1	3.0	30 days
Clover	1	.5	15 days
Collards	1	.5	21 days
Corn (and corn forage)	1	.5	12 days (of picking, cutting, or forage)
Cottonseed	N.R.	.4	5 days before hand picking. 15 DAYS IF COTTON TRASH IS TO BE FED TO DAIRY ANIMALS OR ANIMALS BEING FINISHED FOR SLAUGHTER.
Cranberries	1	.4 1.0	15 days 30 days
Cucumbers	1	.4	Do not apply before vining or within 15 days of harvest.
Dates	1	.8	21 days
Dewberries	N.R.	.4	Apply only before bloom or after harvest.
Eggplants	1	.45	15 days



PARATHION  
(O,O-diethyl O-p-nitrophenyl phosphorothioate)

PRINCIPAL FORMULATIONS: 15% and 25% wettable powders; 1% and 2% dusts;  
25% emulsifiable concentrates; 10% aerosol formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Endive (escarole)	1	.4	21 days
Figs	1	.8	30 days
Gooseberries	1	.4	30 days
Grapes	1	.7	14 days
Grass hay	1	.4	15 days
Guavas	1		30 days
Hops	1	.6	15 days
Kale	1	.5	21 days
Kohlrabi	1	.5	21 days
Lettuce	1	.4	21 days
Loganberries	1	.4	Apply only before bloom
Mangoes	1	1.5	21 days
Melons	1	.5	15 days
Mustard greens	1	.5	21 days
Nectarines	1	2.5	14 days
Oats	1	.4	15 days
Okra	1	.4	21 days
Olives	1	3.0	Do not apply later than August 1



PARATHION  
(O,O-diethyl O-p-nitrophenyl phosphorothioate)

PRINCIPAL FORMULATIONS: 15% and 25% wettable powders; 1% and 2% dusts;  
25% emulsifiable concentrates; 10% aerosol formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Onions	1	.4	15 days
Pea forage	1	.4	10 days
Peaches	1	2.5	14 days
Peanuts	1	.4	15 days
Pears	1	2.5	14 days
Peas	1	.4	10 days
Peppers	1	.4	15 days
Pineapples	1	.5	7 days
Plums	1	2.5	14 days
Potatoes	N.R.	.45	5 days
Pumpkins	1	.5	10 days
Quinces	1	2.5	14 days
Radishes	1	.4	15 days
Raspberries	1	.4	Apply only before bloom
Rutabagas	1	.4	15 days
Spinach	1	.4	21 days
Strawberries	1	.4	14 days
Sugar beets	N.R.	.35	15 days





PARATHION  
(0,0-diethyl 0-p-nitrophenyl phosphorothioate)

PRINCIPAL FORMULATIONS: 15% and 25% wettable powders; 1% and 2% dusts;  
25% emulsifiable concentrates; 10% aerosol formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Summer squash	1	.35	15 days
Swiss chard	1	.35	21 days
Tomatoes	1	.45	10 days
Turnips	1	.4	15 days (21 days if treated tops are to be used for food or feed)
Vetch	1	.4	15 days
Wheat	1	.4	15 days
Currants	1	.4	30 days



PARIS GREEN

Copper metarsenite and copper acetate complex (containing about 57%  $\text{As}_2\text{O}_3$ )

PRINCIPAL FORMULATIONS: 90% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Asparagus	p.p.m. as $\text{As}_2\text{O}_3$	lbs./A.	Sprinkle on ground. Avoid contamination of plant parts.*
Beans			
Blackberries			
Blackeyed peas			
Blueberries			
Broccoli			
Brussels sprouts			
Cabbage	3.5*	2.5 in bran bait*	
Carrots			
Cauliflower			
Celery			
Collards			
Corn			
Cucumbers			
Eggplants			
Huckleberries			
Kale			
Kohlrabi			

\* Applies to all uses.



PARIS GREEN

Copper metarsenite and copper acetate complex (containing about 57%  $\text{As}_2\text{O}_3$ )

PRINCIPAL FORMULATIONS: 90% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m. as $\text{As}_2\text{O}_3$	lbs./A.	
Loganberries	3.5*	2.5 in bran bait*	Sprinkle on ground. Avoid con- tamination of plant parts.*
Melons			
Peppers			
Potatoes	3.5	4	No time limitations
Pumpkins	3.5*	2.5 in bran bait*	Sprinkle on ground. Avoid con- tamination of plant parts.*
Raspberries			
Rutabagas			
Spinach			
Squash			
Strawberries			
Sugar beets	3.5	12	Do not use treated tops for food or feed.

\* Applies to all uses in this group.



PARIS GREEN

Copper metarsenite and copper acetate complex (containing about 57%  $\text{As}_2\text{O}_3$ )

PRINCIPAL FORMULATIONS: 90% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Summer squash Tomatoes Turnips	p.p.m. as $\text{As}_2\text{O}_3$  3.5*	lbs./A.  2.5 in bran bait*	Sprinkle on ground. Avoid con- tamination of plant parts.*
Other truck and garden crops	N.R.	2.5 in bran bait	Sprinkle on ground. Avoid con- tamination of plant parts.

\* Applies to all uses in this group.





PCNB  
Pentachloronitrobenzene

PRINCIPAL FORMULATIONS: 75% wettable powder; 24% emulsifiable concentrate;  
10%, 20%, and 40% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Alfalfa	N.R.	11.25	1 week after cutting or in late fall
Beans	N.R.	7.5	Soil and seed treatment only (at planting time)
Clover	N.R.	11.25	1 week after cutting or in late fall
Cotton	N.R.	3.8	Soil and seed treatment only (at planting time)
Garlic	N.R.	10.35 lbs./ 1000 lbs.	Seed treatment (dust)
		20.6	Soil and seed treatment only (at planting time)
Lettuce	N.R.	22.5	Band treatment when plants are 2-3 inches high
		3.75	Repeat application 10 days later (25-55 days pre-harvest)
Potatoes	N.R.	195 (wetable powders or dusts only)	Broadcast - prior to planting
		65 (wetable powders or dusts only)	Row treatment - prior to planting



PCNB  
Pentachloronitrobenzene

PRINCIPAL FORMULATIONS: 75% wettable powder; 24% emulsifiable concentrate;  
10%, 20%, and 40% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Cole crops*	N.R.	lbs./A.	
		4.5 lbs./100 gals. water	Transplant solution - 3/4 pt. per plant
		40	Row application - prior to trans- planting
		60	Broadcast - prior to planting
*Broccoli Brussels sprouts Cabbage Cauliflower			



# PENTACHLOROPHENOL

PRINCIPAL FORMULATIONS: 5% to 95% liquids; 42.5% to 88% powders and 75% pellets  
(sodium salt formulations)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Potatoes	N.R.	lbs./A. 8.2	Pre-emergence
		8.2	Post-emergence (first shoots visible)
<u>Seed Crops</u>	N.R.	2.9	Do not feed treated seed to meat or dairy animals.
Alfalfa			
Flax			
Ladino clover			
Red clover			
Trefoil			



PERTHANE  
(Diethyl diphenyl dichloroethane)

PRINCIPAL FORMULATIONS: 50% wettable powder; 10% dust

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Cherries	15	10	2 days
Lettuce	15	1	4 days
Spinach	15	1 (as spray) 2.5 (as dust)	7 days
Cattle	N.R.	Dips and sprays up to 0.5%	Do not use on dairy animals or ani- mals being finished for slaughter.
Goats	N.R.	Dips and sprays up to 0.5%	Do not use on dairy animals or ani- mals being finished for slaughter.
Sheep	N.R.	Dips and sprays up to 0.5%	Do not use on dairy animals or ani- mals being finished for slaughter.
Broccoli			
Brussels sprouts			
Cabbage	15*	2*	3 days*
Cauliflower			
Kohlrabi			

\* Applies to all uses in this group.





PHENOTHIAZINE  
Thiodiphenylamine

PRINCIPAL FORMULATIONS: 36% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	7	10	30 days
Pears	7	10	30 days
Quinces	7	10	30 days



PHENYLAMINO CADMIUM DILACTATE (6.25%) PLUS  
 PHENYL MERCURY FORMAMIDE (6.25%)

PRINCIPAL FORMULATIONS: Mixture of technical materials with inert diluents

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		oz./bu.	
Barley	N.R.*	0.5	Seed treatment. Do not use treated seed for food or feed.*
Flax		1.5	
Oats		1.5	
Sorghum		0.5	
Wheat		0.5	

\*Applies to all uses.

NAME	
ADDRESS	
CITY	
STATE	
ZIP	
DATE	
TIME	
BY	
FOR	
REMARKS	
INITIALS	
SIGNATURE	
OFFICE	
TELEPHONE	
TELETYPE	
MAILING	
RECORDS	
TRAINING	
LABORATORY	
IDENTIFICATION	
INVESTIGATION	
ADMINISTRATION	
GENERAL	
OTHER	

# PHENYL MERCURIC ACETATE

PRINCIPAL FORMULATIONS: 2.5%, 4.0%, 5.4%, 7.5%, 10.0%, 22.0% liquids;  
14.0% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Apples	N.R.	lbs./A. 0.5	Delayed dormant through petal fall
Barley	N.R.*	oz./bu. 0.5*	Seed treatment only. Apply as dry dust or by slurry treater. Do not use treated seed for food or feed.*
Millet			
Oats			
Rye			
Sorghum			
Wheat			
Flax	N.R.	1.5	Seed treatment only. Apply as dry dust or by slurry treater. Do not use treated seed for food or feed.

\* Applies to all uses in this group.



# PHENYL MERCURIC FORMAMIDE - CADMIUM DILACTATE

PRINCIPAL FORMULATIONS: Phenyl mercuric formamide 6.25% (mercury 3.8%);  
phenyl amino cadmium dilactate 6.25% (cadmium 1.8%)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Flax	N.R.	oz./bu. 1.5	Seed treatment only. Do not use treated seed for food or feed.
Barley	N.R.*	0.5*	Seed treatment only. Do not use treated seed for food or feed.*
Oats			
Sorghum			
Wheat			

\*Applies to all uses in this group.





PHENYL MERCURI TRIETHANOL AMMONIUM LACTATE

PRINCIPAL FORMULATIONS: 7.5% liquid

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Apples	N.R.	0.2	Through petal fall
Cherries	N.R.	0.045	Up to petal fall
Peaches	N.R.	0.045	Up to petal fall
Pears	N.R.	0.2	Through petal fall
Potatoes	N.R.	1 fl. oz./3 gals. water	Dip seed potatoes one minute.
Sweetpotatoes	N.R.	1 teaspoonful/ 6 gals. water	Pre-bedding root and sprout dip treatment
Walnuts	N.R.	19	3-4 months before harvest



PHENYL MERCURY DIMETHYLDITHIOCARBAMATE

PRINCIPAL FORMULATIONS: 10% powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Apples	N.R.	lbs./A. 0.56	Delayed dormant application through petal fall. Not to be used after petal fall.



# PHENYL MERCURY SALICYLATE

## PRINCIPAL FORMULATIONS:

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Barley	N.R.*	0.5 fl. oz./ bu.	Seed treatment. Do not use treated seed for food or feed.*
Corn		1 fl. oz./100 lbs.	
Cucumbers		2 fl. oz./100 lbs.	
Flax		1.5 fl. oz./ 100 lbs.	
Oats		0.5 fl. oz./ bu.	
Peanuts		2 fl. oz./100 lbs.	
Peas		1 fl. oz./100 lbs.	
Rye		0.5 fl. oz./ bu.	
Sorghum		0.5 fl. oz./ bu.	
Soybeans		1 fl. oz./100 lbs.	
Wheat		0.5 fl. oz./ bu.	

\* Applies to all uses.



# PHENYL MERCURY UREA

PRINCIPAL FORMULATIONS: 6.7% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Small Grains Barley Oats Peas Rice Sorghum Wheat	N.R.*	oz./bu. 0.5*	Seed treatment only. Do not use treated seed for food or feed.*
Flax	N.R.	1.5	Seed treatment only. Do not use treated seed for food or feed.

\* Applies to all uses in this group.





# POTASSIUM CYANATE

PRINCIPAL FORMULATIONS: 92% wettable powder (crystal)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		1bs./A.	
Alfalfa	N.R.	18.4	Dormant treatment (in winter)
Grapes	N.R.	18.4	Downward directed spray - not after petal fall
Peas	N.R.	6.5	Apply at seedling stage only
Strawberries	N.R.	18.4	Dormant treatment (in winter)



# PYRETHRINS

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 1% of pyrethrins, plus 10% of synergists. Petroleum distillate solutions containing 0.05% to 0.4% pyrethrins. Pressurized sprays and aerosols containing 0.1% to 0.6%. Concentrates containing 0.5% to 20% pyrethrins. Dusts containing 0.5% to 2.5%.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Alfalfa	Exempt <sup>1/</sup> *	10 gms./A. as spray. 0.3 lbs./A. as dust.*	No time limitations*
Asparagus			
Beans			
Beets			
Broccoli			
Brussels sprouts			
Cabbage			
Cauliflower			
Celery			
Collards			
Cranberries			
Cucumbers			
Kale			
Lettuce			
Melons			
Peppermint			
Potatoes			
Radishes			

<sup>1/</sup> All synergists are included.

\* Applies to all uses.



PYRETHRINS

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 1% of pyrethrins, plus 10% of synergists. Petroleum distillate solutions containing 0.05% to 0.4% pyrethrins. Pressurized sprays and aerosols containing 0.1% to 0.6%. Concentrates containing 0.5% to 20% pyrethrins. Dusts containing 0.5% to 2.5%.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Spinach	Exempt <sup>1/</sup> *	10 gms./A. as spray. 0.3 lbs./A. as dust.*	No time limitations*
Squash			
Tomatoes			
Truck and vegetable row crops			
Deciduous trees	Exempt <sup>1/</sup> *	0.5 lbs./A. as dust. 0.05 lbs./A. as spray.	No time limitations*
Forage crops			
Small fruits			

<sup>1/</sup> All synergists are included.

\* Applies to all uses in this group.



PYRETHRINS

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 1% of pyrethrins, plus 10% of synergists. Petroleum distillate solutions containing 0.05% to 0.4% pyrethrins. Pressurized sprays and aerosols containing 0.1% to 0.6%. Concentrates containing 0.5% to 20% pyrethrins. Dusts containing 0.5% to 2.5%.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Barley	3 p.p.m. of pyrethrins, 20 p.p.m. of piperonyl butoxide.*	0.6 lbs./1000 bu. as dust. 0.09 lbs./1000 bu. as spray.*	Post-harvest application to grain*
Buckwheat			
Corn			
Rice			
Rye			
Wheat			
Almonds	1 p.p.m. of pyrethrins, 8 p.p.m. of piperonyl butoxide*	0.5 gms./1000 cu. ft. of space. Also 0.1% emulsion dips*	Treatment in canneries and in the field at the time of harvest. Also dips for injured fruits when har- vested, and space treatments for stored commodities.*
Apples			
Beans			
Blackberries			
Blueberries			
Boysenberries			
Cherries			
Cocoa beans			
Copra			
Cottonseed			
Crabapples			

\* Applies to all uses in this group.





PYRETHRINS

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 1% of pyrethrins, plus 10% of synergists. Petroleum distillate solutions containing 0.05% to 0.4% pyrethrins. Pressurized sprays and aerosols containing 0.1% to 0.6%. Concentrates containing 0.5% to 20% pyrethrins. Dusts containing 0.5% to 2.5%.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Currants Dewberries Figs Flaxseed Gooseberries Grain sorghum Grapes Guavas Huckleberries Loganberries Mangoes Muskmelons Oats Oranges Peas Peaches Peanuts Pears Pineapples	1 p.p.m. of pyrethrins, 8 p.p.m. of piperonyl butoxide*	0.5 gms./1000 cu. ft. of space. Also 0.1% emulsion dips*	Treatment in canneries and in the field at the time of harvest. Also dips for injured fruits when har- vested, and space treatments for stored commodities.*

\* Applies to all uses.



PYRETHRINS

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 1% of pyrethrins, plus 10% of synergists. Petroleum distillate solutions containing 0.05% to 0.4% pyrethrins. Pressurized sprays and aerosols containing 0.1% to 0.6%. Concentrates containing 0.5% to 20% pyrethrins. Dusts containing 0.5% to 2.5%.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Plums (fresh prunes) Raspberries Tomatoes	1 p.p.m. of pyrethrins, 8 p.p.m. of piperonyl butoxide*	0.5 gms./1000 cu. ft. of space. Also 0.1% emulsion dips.*	Treatment in canneries and in the field at the time of harvest. Also dips for injured fruits when harvested, and space treatments for stored commodities.*
Tomatoes	1 p.p.m. of pyrethrins, 8 p.p.m. of piperonyl butoxide	0.1% to 1% as dust. 0.01% to 0.1% as spray.	Post-harvest application
Walnuts	1 p.p.m. of pyrethrins, 8 p.p.m. of piperonyl butoxide	0.5 gms./1000 cu. ft. of space. Also 0.1% emulsion dips.	Treatment in canneries and in the field at the time of harvest. Also dips for injured fruits when harvested, and space treatments for stored commodities.
Cattle, including dairy cattle, sheep, hogs, and goats	N.R. <sup>1/</sup>	Water dips and sprays, 0.1%	No time limitations
Cattle, including dairy cattle, sheep, hogs, and goats	N.R. <sup>1/</sup>	Distillate sprays, 0.2%. 1-2 ozs. per adult animal.	No time limitations

<sup>1/</sup> Only synergists included are piperonyl butoxide and N-(2-ethylhexyl) bicyclo[2.2.1] hept-5-ene-2,3-dicarboximide.

\* Applies to all uses in this group.



# ROTENONE

PRINCIPAL FORMULATIONS: 0.75% to 1.5% dusts; emulsifiable concentrates containing 2% or 3%; wettable powders containing about 5%  
(All formulations include the usual amount of related resins)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Asparagus	Exempt*	0.3	No time limitations*
Beans		0.35	
Blueberries		0.3	
Bramble fruits, including raspberries, blackberries, and dewberries		0.4	
Cherries		0.75	
Cole crops		0.35	
Corn		0.3	
Cranberries		0.35	
Cucurbits		0.4	
Currants		0.3	
Eggplant		0.3	
Gooseberries		0.3	
Mint		0.3	
Peaches		0.8	
Peas		0.35	
Peppers		0.35	

\* Applies to all uses.



ROTENONE

PRINCIPAL FORMULATIONS: 0.75% to 1.5% dusts; emulsifiable concentrates containing 2% or 3%; wettable powders containing about 5%  
(All formulations include the usual amount of related resins)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Potatoes	Exempt*	lbs./A. 0.3	No time limitations*
Sweetpotatoes		0.3	
Strawberries		0.3	
Tomatoes		0.4	

\* Applies to all uses.





# RYANIA

PRINCIPAL FORMULATIONS: 100% dust; dusts or wettable powders ranging from 40%-100% Ryania, with or without synergists

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Corn		16	
Cranberries	<u>1/</u> Exempt *	25	No time limitations*
Pome fruits		60	
Sugar cane		8	

1/ Except that the exemption does not apply if the raw agricultural commodity is treated at time of harvest or post-harvest.

\* Applies to all uses.



SABADILLA

PRINCIPAL FORMULATIONS: 10% to 20% dusts; certain specialized formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Citrus fruits	Exempt	lbs./A. (alkaloid)  0.2	No time limitations
Deciduous fruits and small fruits	Exempt	lbs./A. (whole ground seed)  12	No time limitations
Truck and forage crops	Exempt	10	No time limitations



SCHRADAN<sup>1/</sup>  
Octamethyl pyrophosphoramide

PRINCIPAL FORMULATIONS: Technical material containing about 70% octamethyl pyrophosphoramide; emulsifiable concentrates containing from 2 to 4 lbs. of active ingredient per gallon; 10% aerosols for greenhouse use

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Cotton	N.R.	lbs./A. 1.5	Spray young cotton plants 4 weeks after planting. A second application 3-4 weeks later may be made if necessary.

<sup>1/</sup> Formerly known as "OMPA"



<sup>1/</sup>  
 SESONE  
 (Sodium 2,4-dichlorophenoxyethyl sulfate)

PRINCIPAL FORMULATIONS: 90% water soluble powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Asparagus	2	3.6	Pre-emergence and after cutting season
Corn (seed), field and sweet	N.R.	3.6	At lay-by. Do not use treated grain or forage for food or feed.
Peanuts (nuts, hulls, hay)	6	2.7	At planting time
Potatoes	6	3.6	Pre-emergence and then monthly to lay-by (21-28 days)
Strawberries	2	3.6	7 days of picking

1/ Formerly SES





# SODIUM DIMETHYLDITHIOCARBAMATE - MERCAPTOBENZOTHAZOLE (MIXTURE)

PRINCIPAL FORMULATIONS: Sodium salt (emulsifiable concentrate) containing 27.6% dimethyldithiocarbamate and 2.4% 2-mercaptobenzothiazole

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Sorghum	N.R.	1.2 fl. oz./ bu	Seed treatment only
Sweetpotatoes	N.R.	2% solution	Dip seed potatoes before planting.
Wheat	N.R.	1.2 fl. oz./ bu	Seed treatment only



# SODIUM ORTHOPHENYLPHENATE

PRINCIPAL FORMULATIONS: 97% wettable powder; 30%, 34%, and 40% solutions

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Citron Grapefruit Kumquats Lemons Limes Oranges Tangeloes Tangerines	p.p.m.    10%	Dip 2 minutes in mixture of 25 lbs. of wettable pow- der/100 gals. water plus caustic and hexamine*	Follow with fresh water rinse.*
Apples Pears	5%	Dip in 0.6% solution of 40% product in 100 gals. water*	Follow with fresh water rinse.*

\*Applies to all uses in this group.



# SODIUM POLYSULFIDE

PRINCIPAL FORMULATIONS: We have been able to identify only two commercial formulations. The first is an 84% wettable powder and the other a 40% emulsifiable concentrate. The wettable powder is restricted to dormant and delayed dormant usage. The emulsifiable concentrate is restricted to summer usage.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Beans	Safe chemical	1.5	No time limitations
Pome fruits	Safe chemical	100 14	Dormant or delayed dormant No time limitations
Stone fruits	Safe chemical	75 10	Dormant or delayed dormant No time limitations



SODIUM SALT OF NPA  
(Sodium salt of N-1 naphthyl phthalamic acid)

PRINCIPAL FORMULATIONS: 23.7% liquid <sup>1/</sup>  
21.5% granular

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE Equiv. NPA	LIMITATIONS
Asparagus	N.R.	lbs./A 8 <sup>2/</sup>	Pre-emergence. Apply as area treatment within 48 hours of seeding.
Asparagus (established beds)	N.R.	8	Apply 48 hours after first spring discing (60-75 days before harvest). Repeat at close of cutting season, right after last cultivation.
Cantaloupes	N.R.	6	Pre-emergence (90-120 days before harvest)
	N.R.	4	Post-emergence. Apply immediately after transplanting or just before vining and before weeds emerge. (50-80 days before harvest) <sup>3/</sup>
Cotton (irrigated, Texas, New Mexico, Arizona, and California)	N.R.	8	Pre-emergence in band over the row. (130-160 days from harvest). Treatment followed by irrigation to thoroughly wet the soil surface.
	N.R.	6	Post-emergence, after cotton plants are 10 inches high, as direct area spray. Repeat at lay-by time.
Cucumbers	N.R.	6	Pre-emergence (50-70 days from harvest)
	N.R.	4	Post-emergence. Apply just before vining, immediately after transplanting or before weeds emerge. (25-35 days from harvest) <sup>3/</sup>
Muskmelons	N.R.	6	Pre-emergence (50-75 days from harvest)

<sup>1/</sup> Equivalent to 22% of N-1 naphthyl phthalamic acid (2 lbs. acid per gallon).

<sup>2/</sup> With band application, use proportionately lower dosages.

<sup>3/</sup> Do not apply in California, Arizona, New Mexico, and Texas except in granular form.





SODIUM SALT OF NPA  
(Sodium salt of N-1 naphthyl phthalamic acid)

PRINCIPAL FORMULATIONS: 23.7% liquid <sup>1/</sup>  
21.5% granular

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE Equiv. NPA	LIMITATIONS
		lbs./A.	
Muskmelons	N.R.	4	Post-emergence. Apply just before vining immediately after trans-planting or before weeds emerge. (25-35 days from harvest) <sup>3/</sup>
Peanuts	N.R.	8 <sup>2/</sup>	Pre-emergence area spray (140-150 days from harvest)
Pumpkins	N.R.	4	Pre-emergence (100-130 days from harvest)
Soybeans	N.R.	8 <sup>2/</sup>	Pre-emergence (135-180 days from harvest)
Squash	N.R.	4	Pre-emergence (50-110 days from harvest)
Watermelons	N.R.	6	Pre-emergence (100-125 days from harvest)
	N.R.	4	Post-emergence. Apply immediately after transplanting or just before vining and before weeds emerge. (60-80 days from harvest) <sup>3/</sup>

<sup>1/</sup> Equivalent to 22% of N-1 naphthyl phthalamic acid (2 lbs. acid per gallon).

<sup>2/</sup> With band application, use proportionately lower dosages.

<sup>3/</sup> Do not apply in California, Arizona, New Mexico, and Texas except in granular form.



# STREPTOMYCIN

PRINCIPAL FORMULATIONS: 15% and 20% powders; 0.1%-8.5% dusts; 37% and 62.5% formulations of sulfates and nitrates

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Apples	N.R.	0.92	Do not apply after the fruit is visible. (125-165 days from harvest)
Celery	N.R.	0.2	Application when first true leaves appear. Plant beds only. (75-100 days from harvest)
Pears	N.R.	0.92	Do not apply after the fruit is visible. (125-165 days from harvest)
Peppers	N.R.	0.2	Application when first true leaves appear. Plant beds only. (75-100 days from harvest)
Potatoes	N.R.		Soak cut seed pieces 30 minutes in 100 p.p.m.
Tomatoes	N.R.	0.2	Application when first true leaves appear. Plant beds only. (75-100 days from harvest)
Walnuts	N.R.	0.92	No application after fruit is visible. (125-160 days from harvest)



# SULFUR

PRINCIPAL FORMULATIONS: Wettable sulfurs containing from 30% to 98% sulfur;  
dusts containing from 20% to 98% sulfur

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Alfalfa (seed)		15.0	Apply in bud stage.
Almonds		14.5	Apply as calyx spray (140-165 days before harvest).
Apples		38.0	Apply at 10-day intervals beginning with delayed dormant spray.
Asparagus		38.0	Post-harvest use only
Beans		22.0	Apply weekly beginning when first true leaves have formed (close to harvest).
Berries	Safe chemical*	17.5	Begin when foliage appears. Repeat at 10-day intervals. Do not apply later than 7 days before harvest.
Cherries		28.5	Complete schedule (close to harvest)
Clover (seed)		15.0	Apply in bud stage.
Cotton		28.5	Use as necessary to control mildew.
Cucurbits		22.0	Apply weekly beginning when first true leaves have formed (close to harvest).
Currants		17.5	Complete schedule (close to harvest)
Eggplants		22.0	Apply weekly beginning when first true leaves have formed (close to harvest).
Garlic		28.5	Apply at 7-10 day intervals (close to harvest).

\* Applies to all uses.



SULFUR

PRINCIPAL FORMULATIONS: Wettable sulfurs containing from 30% to 98% sulfur;  
dusts containing from 20% to 98% sulfur

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Gooseberries	Safe chemical*	lbs./A. 17.5	Begin when foliage emerges - repeat at 10-day intervals. Do not apply later than 7 days before harvest.
Grains		29.4	Use as necessary to control powdery mildew and rust on wheat.
Grapes		14.0	Complete schedule(close to harvest)
Mangoes		24.0	Apply from petal fall to 3 weeks after fruit sets (100-155 days before harvest).
Onions		28.5	Apply at 7-10 day intervals (close to harvest).
Peaches		28.0	Complete schedule (close to harvest)
Peanuts		18.5	Apply at 10-14 day intervals (close to harvest).
Pears		38.0	Begin at delayed dormant spray and continue at 10-day intervals (close to harvest).
Peas		22.0	Apply at 7-10 day intervals (close to harvest)
Plums		28.0	Begin at pink stage and continue at 10-day intervals (close to harvest)
Prunes		28.0	Begin at pink stage and continue at 10-day intervals (close to harvest)
Raspberries		17.5	Begin when foliage emerges. Repeat at 10-day intervals (close to harvest).

\* Applies to all uses.





SULFUR

PRINCIPAL FORMULATIONS: Wettable sulfurs containing from 30% to 98% sulfur;  
dusts containing from 20% to 98% sulfur

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Soybeans	Safe chemical*	lbs./A. 18.5	Apply at 10-14 day intervals (close to harvest).
Strawberries		38.0	Post-harvest use only
Field and forage crops		50	No time limitations*
Fruits	Safe chemical*	50	
Vegetables		50	
Cattle (dairy, beef)	Safe chemical*	10% smears and 25% to 75% dusts	No time limitations*
Goats			
Hogs			
Sheep			
Poultry	Safe chemical	25% to 75% dusts	No time limitations

\* Applies to all uses in this group.



SULPHENONE  
p-chlorophenyl phenyl sulfone

PRINCIPAL FORMULATIONS: 50% wettable powder; 10% to 20% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Almonds	N.R.	8	21 days Do not feed treated hulls to live- stock.
Apples	8	8	7 days
Peaches	8	12	14 days
Pears	8	8	7 days



# SUMMER OILS

PRINCIPAL FORMULATIONS: These oils are marketed primarily as emulsifiable concentrates containing a high percentage of oil. The oil in most cases will have an unsulfonated residue of 90% or more.

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A	
Blackberries	Exempt*	20	No time limitations*
Citrus		420	
Currants		20	
Deciduous fruit		112	
Grapes		20	
Olives		165	
Raspberries		20	
Truck and garden crops		15	

\* Applies to all uses.



2,4,5-T  
2,4,5-trichlorophenoxyacetic acid

PRINCIPAL FORMULATIONS: 10% 2,4,5-T and paste (with 20% 2,4-D acid);  
49% amine salts and ester emulsifiable concen-  
trates (40% to 52% volatile, 8% to 90% low  
volatile)

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Rice	N.R.	lbs./A.  1.5	Before flooding (before boot stage); after flooding (80-110 days pre-harvest)





TARTAR EMETIC  
Potassium antimonyl tartrate

PRINCIPAL FORMULATIONS: Technical material

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m. as $\text{Sb}_2\text{O}_3$	lbs./A.	
Citrus fruits	3.5	2.5	Bait spray for thrips. 30 days.



TCA  
Trichloroacetic acid

PRINCIPAL FORMULATIONS: (Sodium salts) 90% to 94% granular formulations containing 0.75 lb. TCA per pound; 47% to 50% liquids containing 5.4 lbs. TCA per gallon

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Cabbage	N.R.	8.1	Pre-emergence. Apply soon after planting.
Cauliflower	N.R.	8.1	Pre-emergence. Apply soon after planting.
Red beets	N.R.	8.1	Pre-emergence. Do not use treated tops for food or feed.
Sugar beets	N.R.	8.1	Pre-emergence. Do not use treated tops for food or feed.
Sugar cane	N.R.	27	Pre-emergence; post-emergence, up to 3 weeks after planting.
Tomatoes	N.R.	8.1	Pre-emergence.



TDE<sup>1/</sup>  
1,1-dichloro-2,2-bis(p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate; 5% dust

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Apples	7	8	30 days
Apricots	7	8	30 days
Beans	7	3	Do not apply to green or string beans after the pods begin to form.
Blackberries	7	3	For sprays, no application after the fruit begins to form. For dusts, 14 days.
Broccoli	7	3	Do not apply after the edible parts start to form.
Brussels sprouts	7	3	Do not apply after the edible parts start to form.
Cabbage	7	3	Do not apply after the edible parts start to form.
Cauliflower	7	3	Do not apply after the edible parts start to form.
Cherries	7	8	30 days
Citrus fruits	7	8	30 days
Corn	7	3	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Cucumbers	7	3	1 day
Eggplants	7	3	1 day

<sup>1/</sup> Also known as "DDD"



1/  
TDE

1,1-dichloro-2,2-bis(p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate; 5% dust

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Grain storage bins	N.R.	200 mg./sq.ft.	The bin should be empty at time of treatment. When dry, the bin may be filled with grain.
Grapes	7	5	40 days, plus warning to use no stickers or spreaders after the buckshot stage.
Kohlrabi	7	3	Do not apply after the edible parts start to form.
Lettuce	7	2	Do not apply to head lettuce after the heads begin to form. Do not apply to leaf lettuce after the seedling stage.
Loganberries	7	3	For sprays, no application after the fruit begins to form. For dusts, 14 days.
Melons	7	3	1 day
Nectarines	7	8	30 days
Onions	N.R.	3	Do not apply to green or spring onions.
Peaches	7	8	30 days
Pears	7	8	30 days
Peppers	7	3	1 day
Potatoes	N.R.	3	No time limitations
Plums (fresh prunes)	7	8	30 days

1/ Also known as "DDD"





1,1-dichloro-2,2-bis(p-chlorophenyl) ethane

PRINCIPAL FORMULATIONS: 50% wettable powder; 25% emulsifiable concentrate; 5% dust

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Pumpkins	7	3	1 day
Quinces	7	8	30 days
Raspberries	7	3	For sprays, no application after the fruit begins to form. For dusts, 14 days.
Rutabagas	7	3	No time limitations
Spinach	7	2	Apply only in the seedling stage.
Squash	7	3	1 day
Strawberries	7	3	For sprays, no application after the fruit begins to form. For dusts, 5 days.
Tomatoes	7	4	1 day
Turnips	7	3	Do not apply after the seedling stage if the tops are to be used for food.

1/ Also known as "DDD"



# TETRAETHYL PYROPHOSPHATE

PRINCIPAL FORMULATIONS: 20% to 40% emulsifiable concentrates; 2% to 5% dusts<sup>1/</sup>

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Citrus	N.R.*	1bs./A. 2.0 spray 2.5 dust	3 days
Deciduous orchard fruits		2.0 spray 2.5 dust	3 days
Forage crops		0.4 spray 1.0 dust	3 days
Truck and vege- table crops		0.4 spray 1.0 dust	3 days

<sup>1/</sup> Dust mixtures are highly perishable.

\* Applies to all uses.



# TETRA-iodoETHYLENE

PRINCIPAL FORMULATIONS: 77.75% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Melons	N.R.	Dilutions of 1:250 to 1:1000	Post-harvest dip to prevent decay



THIMET

O,O-diethyl S-(ethylthiomethyl) phosphorodithioate

PRINCIPAL FORMULATIONS: 44% product containing 54% carbon dust and 2% methyl cellulose

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Cotton	N.R.	lbs./A. 0.88	Seed treatment only <sup>1/</sup>

1/ Gives temporary protection for young plants





THIRAM  
Tetramethyl thiuram disulfide

PRINCIPAL FORMULATIONS: 40%, 50%, and 75% seed protectants;  
65% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Apples	3 p.p.m.	6.5 lbs./A.	No time limitations
Beans			
Beets			
Carrots			
Corn			
Cowpeas			
Crucifers			
Cucurbits	N.R.*	4 oz./100 lbs.*	Seed treatment only. Do not use treated seed for food or feed.*
Eggplant			
Endive			
Forage legumes			
Lettuce			
Onions			
Peanuts			
Peas			
Peppers			
Radishes			

\* Applies to all uses in this group.

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF THE HISTORY OF ARTS AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS AND ARCHITECTURE  
THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS AND ARCHITECTURE

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS AND ARCHITECTURE

THIRAM  
Tetramethyl thiuram disulfide

PRINCIPAL FORMULATIONS: 40%, 50%, and 75% protectants;  
65% wettable powder

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Rice	N.R.*	4 oz./100 lbs.*	Seed treatment only. Do not use treated seed for food or feed.*
Sorghum			
Soybeans			
Spinach			
Sudan grass			
Swiss chard			
Tomatoes			

\* Applies to all uses in this group.



TOXAPHENE

Chlorinated camphene containing 67% to 69% chlorine

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 4, 6, or 8 lbs. per gallon; 50% wettable powder; 10% to 20% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Alfalfa and clover	Restrictive labeling	3.5	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not use on for- age to be sold commercially or to be shipped interstate.
Apples	7	10	40 days
Beans	7	1.6 as spray 3 as dust	Make no application to green or snap beans after the pods start to form.
Broccoli	7	1.6 as spray 2 as dust	Do not apply after the edible parts start to form.
Brussels sprouts	7	1.6 as spray 2 as dust	Do not apply after the edible parts start to form.
Cabbage	7	1.6 as spray 2 as dust	7 days
Carrots	7	2	No time limitations
Celery	7	1.6 as spray 2 as dust	Do not apply after the plant is half grown or after it starts to bunch.
Citrus fruits	7	4.5	Do not apply within 30 days of harvest. Do not feed bulk to dairy animals or animals being finished for slaughter.



TOXAPHENE  
Chlorinated camphene containing 67% to 69% chlorine

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 4, 6, or 8 lbs. per gallon; 50% wettable powder; 10% to 20% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Corn	Restrictive labeling	4	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Cottonseed	7	4	DO NOT FEED TREATED COTTON TRASH TO DAIRY ANIMALS OR ANIMALS BEING FINISHED FOR SLAUGHTER.
Cowpeas	Restrictive labeling	3	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Cranberries	7	5	Do not apply after the fruit starts to form.
Eggplant	7	3	5 days
Hay	Restrictive labeling	2	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not use on forage to be sold commercially or to be shipped interstate. <u>1/</u>
Hickory nuts	7	10	No time limitations
Horse-radishes	7	1.5	Do not use tops.
Lettuce	7	5	Do not apply after seedling stage for leaf lettuce. 7 days for head lettuce if outer leaves are stripped at harvest. (Not after heads start to form if outer leaves are not to be stripped).
Okra	7	3	Do not use after the pods start to form.
Onions	7	2	Do not apply to green or spring onions.

1/ See explanatory statement in introduction





TOXAPHENE

Chlorinated camphene containing 67% to 69% chlorine

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 4, 6, or 8 lbs. per gallon; 50% wettable powder; 10% to 20% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Parsnips	7	1.5	Do not use tops.
Peaches	7	8	40 days
Peanuts	7	25	Soil application only. Do not apply after first cultivation.
Peanuts (forage)	Restrictive labeling	1.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Pears	7	10	40 days
Peas	7	3	Do not apply to varieties with edible pods after pods start to form.
Pecans	7	8	No time limitations
Peppers	7	3	5 days
Pimentos	7	2	2 days
Potatoes	N.R.	3	Foliage treatment only
Rutabagas	7	4	Do not use treated tops for food or feed.
Sorghum	Restrictive labeling	4	Do not feed treated forage to dairy animals or animals being finished for slaughter. Do not use on forage to be sold commercially or to be shipped interstate. <u>1/</u>
Soybeans	Restrictive labeling	3	Do not feed treated forage to dairy animals or animals being finished for slaughter.

1/ See explanatory statement in introduction



TOXAPHENE

Chlorinated camphene containing 67% to 69% chlorine

PRINCIPAL FORMULATIONS: Emulsifiable concentrates containing 4, 6, or 8 lbs. per gallon; 50% wettable powder; 10% to 20% dusts

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Strawberries	7	3	Do not apply after the fruit starts to form.
Tomatoes	7	4	7 days
Velvet beans	Restrictive labeling	3	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Forage crops (generally)	N.R. (Certain truck crops are covered by 7 p.p.m.)	1% dry bait at 10 lbs./A. Wet bait 4% plus water at 20 lbs./A.	No time limitations
Truck crops (generally)			
Orchard crops (generally)			
Vetch	Restrictive labeling	3	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Grass, pasture and range	Restrictive labeling	3.5	Do not feed treated forage to dairy animals or animals being finished for slaughter.



2-(2,4,5-TRICHLOROPHENOXY) PROPIONIC ACID

PRINCIPAL FORMULATIONS: 62.9% isooctyl ester; 64.5% butyl ether ester

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Rice	N.R.	lbs./A. 1.5	Treat 4-8 weeks after emergence of rice. If flooded, treat 7-9 weeks after seeding.



VAPAM  
(Sodium methyldithiocarbamate)

PRINCIPAL FORMULATIONS: 31% liquid

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
Vegetable plant bed	N.R.	lbs./A.  490	Cultivate 5-7 days after application. Do not plant crops for 14-21 days after fumigation.





ZINC DIMETHYLDITHIOCARBAMATE - MERCAPTOBENZOTHAZOLE (MIXTURE)

PRINCIPAL FORMULATIONS: Zinc salt (powder) containing 59.8% dimethyldithiocarbamate and 5.2% 2-mercaptobenzothiazole

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
		lbs./A.	
Almonds	N.R. <sup>1/</sup>	7.8	Up to petal fall (90-110 days pre-harvest)
Potatoes	N.R.	3.25	Up to harvest
Tomatoes	N.R.	3.25	5 days

1/ A tolerance of 0.1 p.p.m. has been established for ziram on almonds.



ZINEB  
(Zinc ethylene bisdithiocarbamate)

PRINCIPAL FORMULATIONS: 65% wettable powder; 3.9%, 4.6%, 7.6%, 10.0%, and 16.25%  
dust formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Almonds	N.R.	10.4	Dormant to petal fall and post-harvest
Apples	7	7.6	7 days
Apricots	7	7.6	Petal fall
Asparagus	N.R.	3	Post-harvest
Beans, lima, snap, and string	7	3	7 days
Beets, including tops	7 *tops	3	7 days if tops are to be consumed
Broccoli	7	4.8	7 days
Brussels sprouts	7	4.8	7 days
Cabbage	7	4.8	7 days
Cantaloupes	7	3	No restriction
Carrots	7	3	7 days if treated tops are to be used as food or feed
Cauliflower	7	4.8	7 days
Celery	7	3	Remove residues by washing and stripping
Cherries	7	6.5	7 days
Collards	7*	3	7 days

\*Petition pending to increase tolerance to 25 p.p.m. with 7-day limitation



ZINEB  
(Zinc ethylene bisdithiocarbamate)

PRINCIPAL FORMULATIONS: 65% wettable powder; 3.9%, 4.6%, 7.6%, 10.0%, and 16.25% dust formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Corn	7	3	Do not feed treated forage to dairy animals or animals being finished for slaughter.
Cotton (seed)	N.R.	2.2	Seed row at planting
Cucumbers	7	3	No time limitations
Currants	7	3	Post-harvest use only
Eggplant	7	3	No time limitations
Grapes	7	3	7 days
Hops	60	3	2 weeks
Lettuce	7*	3	7 days
Melons	7	3	No time limitations
Mushrooms	7	.07-0.1 lb./ 4000 sq. ft.	Apply to casing soil between "breaks."
Muskmelons	7	3	No time limitations
Mustard greens	7*	3	7 days
Onions	7	3	7 days on green onions
Peaches	7	6.5	Petal fall
Pears	7	6.5	7 days
Pecans	N.R.	15	45 days
Peppers	7	6.5	No time limitations

\*Petition pending to increase tolerance to 25 p.p.m. with 7-day limitation



ZINEB  
(Zinc ethylene bisdithiocarbamate)

PRINCIPAL FORMULATIONS: 65% wettable powder; 3.9%, 4.6%, 7.6%, 10.0%, and 16.25% dust formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Plums	7	6.5	45 days
Potatoes	N.R.	3	Foliage application only
Pumpkins	7	3	No time limitations
Spinach	7*	3	7 days
Squash, summer	7	3	7 days
Squash, winter	7	3	No time limitations
Strawberries	7	2.5	7 days
Swiss chard	7*	3	7 days
Tomatoes	7	3	No time limitations
Turnips (root)	7	3	No time limitations
Turnips (tops)	7	3	7 days if tops are to be used as food or feed
Watermelons	7	3	No time limitations
Wheat	1	2.1	3-4 weeks

\*Petition pending to increase tolerance to 25 p.p.m. with 7-day limitation





ZINEB

PRINCIPAL FORMULATIONS: 65% wettable powder; 3.9%, 4.6%, 7.6%, 10.0%, and 16.25% dust formulations

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Citrus fruits	7	3.3	Apply single spray as needed between late June and early August.
Kale	7	2.4	Seedbed application 3 times a week until transplanted. Field application 4-5 day intervals until edible parts are half grown.
Kohlrabi	7	2.4	Seedbed application 3 times a week until transplanted. Field application 4-5 day intervals until edible parts are half grown.
Radishes	7	2.4	Apply twice weekly.



ZIRAM  
Zinc dimethyl dithiocarbamate

PRINCIPAL FORMULATIONS: 7.6%, 10.0%, or 15.0% dusts; 76% or 95% wettable powders

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Almonds	0.1	6.1	Early cover spray. 5 weeks after petal fall. (165 days) <u>1/</u>
Apples	7	7.6	Pacific Northwest. Cover sprays. No restrictions.
Apricots	7	7.6	Early cover sprays. (80-90 days)
Beans	7	3	Do not apply to snap beans later than 4 days before any picking.
Beets	7	3	7 days of harvest if beet tops are consumed.
Blackberries	7	3	Pacific Northwest. Mid-June to early July.
Blueberries	7	4.6	Loose bud scales and 7 days later. (30-45 days)
Broccoli	7	3	7 days
Cabbage	7	3	7 days
Cantaloupes	7	3	No time limitations
Carrots	7	3	7 days if carrot tops are consumed.
Cauliflower	7	3	7 days
Celery	7	3	Remove excess residue by stripping, trimming, and washing.
Cherries	7	2.5	7 days

1/ Limitation based on cultural practice, not on residue requirement.



ZIRAM  
Zinc dimethyl dithiocarbamate

PRINCIPAL FORMULATIONS: 7.6%, 10.0%, or 15.0% dusts; 76% or 95% wettable powders

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A.	
Cranberries	7	6	4 weeks after mid-bloom. (35-55 days)
Cucumbers	7	3	No time limitations
Eggplant	7	3	No time limitations
Kohlrabi	7	3	7 days
Melons	7	3	No time limitations
Muskmelons	7	3	No time limitations
Peaches	7	7.6	Early cover and before harvest. Remove excess residue by wiping or brushing.
Pears	7	7.6	Pacific Northwest. Cover sprays. No restrictions.
Peas	7	3	7 days
Pecans	0.1	15	8 weeks after bloom. (120-145 days)
Peppers	7	3	No time limitations
Potatoes	N.R.	3	Foliage use only
Pumpkins	7	3	No time limitations
Radishes	7	3	No time limitations
Raspberries	7	3	Western Washington. Pre-harvest, mid-harvest, and late harvest.
Squash, summer and winter	7	3	No time limitations



ZIRAM  
Zinc dimethyl dithiocarbamate

PRINCIPAL FORMULATIONS: 7.6%, 10.0%, or 15.0% dusts; 76% or 95% wettable powders

USE	TOLERANCE OR BASIS OF ACCEPTANCE	DOSAGE	LIMITATIONS
	p.p.m.	lbs./A	
Strawberries	7	4.6	20-40 days after early bloom. If applied within 7 days of picking, remove residues by washing.
Tomatoes	7	3	No time limitations
Turnips	7	3	No time limitations
Watermelons	7	3	No time limitations













NATIONAL AGRICULTURAL LIBRARY



1022714157